

Public Utilities

FORTNIGHTLY



March 15, 1945

ADVANTAGES OF ORIGINAL COST CLASSIFICATION OF PLANT

Part I.

By Asel R. Colbert

« »

"Co-ops" under a Microscope

By Larston D. Farrar

« »

Radio for Transit Companies

By Drew J. David

PUBLIC UTILITIES REPORTS, INC.
PUBLISHERS



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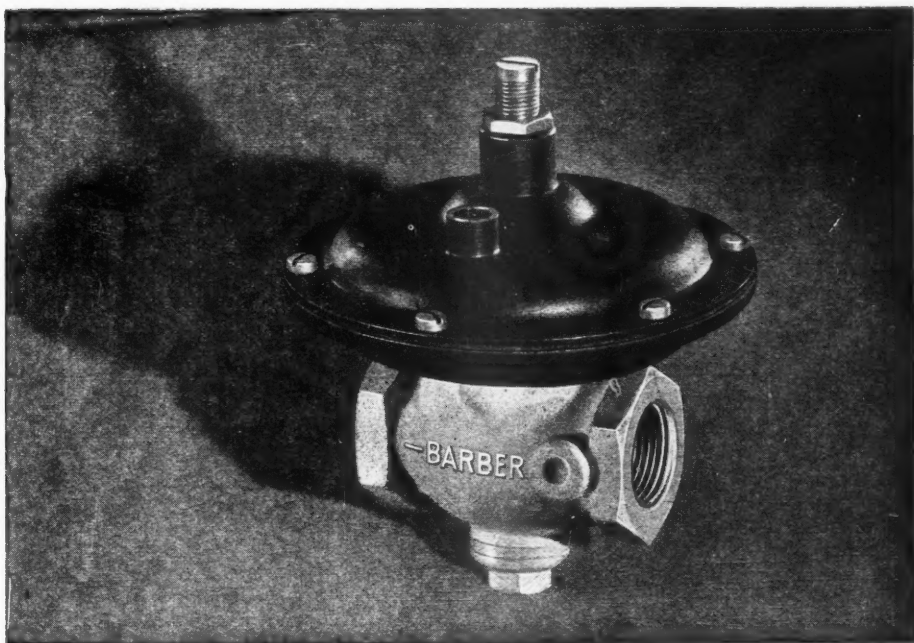
Conservation of materials is no new story to the men who operate public utilities. With thrift and efficiency they have always planned for conservation.

They've squeezed the last ounce of use out of materials and equipment in their care . . . and today, that need is intensified.

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Public Utilities Fortnightly



VOLUME XXXV March 15, 1945 NUMBER 6

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Q This magazine is an open forum for the free expression of opinion concerning public utility regulation and allied topics. It is supported by subscription and advertising revenue; it is not the mouthpiece of any group or faction; it is not under the editorial supervision of, nor does it bear the endorsement of, any organization or association. The editors do not assume responsibility for the opinions expressed by its contributors.

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MAR. 15, 1945

IT cuts the burr out clean as a whistle—but it doesn't gouge, thin or split the pipe. Quick easy feather-light strokes, no effort at all. The trick is in the extra long taper—it saves you work *and pipe*. Complete with ratchet handle—or you may buy reamer unit alone for use in your **RIGID** No. 00R threader handle. War demand

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Pages with the Editors

COMPARISONS are odious, as the lawyers say, but we could not help comparing the outraged protests of the night-club fraternity in New York and elsewhere over the recent midnight curfew with the reaction of the electric power industry to one of Mr. Byrnes' earlier restrictive edicts—the "brown-out." We quote the following paragraph from the January 17th issue of *P. U. R. Executive Information Service*, concerning the operating electric industry's reaction to the January 15th "brown-out" order of the Office of War Utilities:

"OWU is pleased with the coöperation of the electric industry so far. Company officials generally are taking the position that there is an opportunity here to associate the electric power business in the mind of the public, even more closely than before, with essential activities of the nation's war effort. They are said to feel that the ultimate dividends in public relations may well offset revenue losses from the 'brown-out,' especially if the public is impressed with the wholehearted compliance, by the industry, with an order which means money out of its own pocket. How much will the brown-out cost the industry? It has been variously estimated that the drop in gross revenues will range from \$40,000,000 to \$60,000,000 a year (excluding publicly owned operating agencies), depending on the degree of prospective enforcement."

Compare this with the following dispatch printed in the *New York Daily News* of February 20th:

"A 'multi-million-dollar prohibition lobby in Washington' was responsible for the midnight curfew for entertainment places, scheduled to go into effect next Monday [February 26th], Billy Rose, vice president of the Cafe Owners' Guild and owner of Billy Rose's Diamond Horse Shoe, charged today.

"Rose, speaking at the Cafe Zanzibar at an emergency meeting of night-club owners, including operators from Boston, Chicago, and Philadelphia, added that the curfew was only one of a series of steps designed to 'slip complete prohibition' over on the U. S. . . .

"He proposed that after the emergency is over 'we will fight those elements that slipped prohibition over on us after the last war and are trying to do so again in this war.' He said the dries already had succeeded in bringing prohibition to several states.

"The city's night-club owners were furious over the curfew, and they showed it. Op-



ASEL R. COLBERT

The benefits of original cost accounting are not restricted to the regulatory agency or the public it represents.

(SEE PAGE 333)

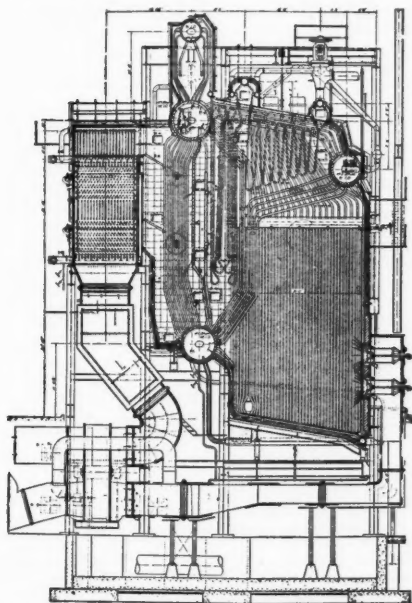
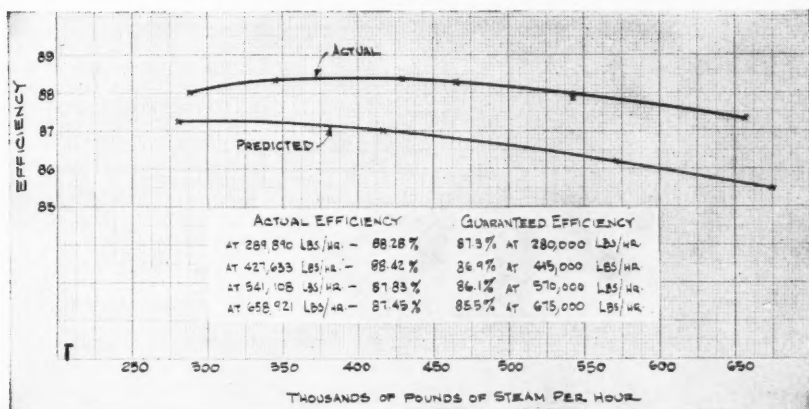
erators at the meeting were about evenly divided as to whether they should close their clubs or operate on a modified plan, whereby floor shows would be curtailed."

WE can understand, of course, the annoyance of some of these night-club owners and operators in being suddenly confronted with a restrictive measure, especially applicable to their business, as a result of which they stand to lose a considerable amount of money they might otherwise make. It is also understandable that, in the first heat of resentment, they might suspect an organized plot against their existence. But, as *The New York Times* editorially remarks, "They are not, of course, being abolished. They may still do a little, prior to twelve midnight, to ease the cares of the day. They are not being punished for being gay in a sad world. They are being curtailed to save fuel. To that argument there is no answer. If they wish to cut out entertainment and limit themselves to serving food they can continue after midnight, but hardly as night clubs. It is to the credit of most of the New York proprietors who have been quoted that they accept the order in good grace."

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88.42% Riley Steam Generating Unit Efficiency

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675,000 lbs. per hour
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Unit

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As far as the prohibition angle is concerned, one might even be constrained to observe that the gentleman with the red nose who is determined to consume as much *spiritus fermenti* as possible, could do a better job for himself at much less expense by buying an item of package goods and going to his own room, than if he violated the curfew law in a New York night club. Anyhow, we can't help but make a second comparison of the problems of the New York night-club owners with another editorial which appeared on the same day in the Baltimore *Sun* as the result of dispatches from the recent bloody battle of Iwo Jima. The *Sun* editorial stated in part:

"... When it is over, most of the Japanese (some 14,000, it is said) will be dead. So will many of the Marines. This is what the fighting is in the Pacific. We talk of our gigantic fighting machine. On Iwo that machine is mostly Americans in their early twenties who never heard of Iwo until last week and never want to hear of it again.

"Here at home the Director of War Mobilization has requested that night clubs and other places of amusement will please make the wartime sacrifice of closing their doors and turning off the heat and lights promptly at midnight."

WE are not complaining editorially. We cannot help observe that the military officials in charge of censorship for security purposes move in mysterious ways. For two years now it has been forbidden to describe or even mention the topic of "radar." About a year ago a telephone engineer of our acquaintance wanted to speak to a closed convention of telephone folks about possible postwar application

of radar to the telephone business. A request was made for permission on the theory that such a discussion could have no possible interest to the enemy, or anybody else for that matter, not technically concerned with American postwar telephony. But the answer was still "no" and at this writing there had been no change.

Imagine our surprise, therefore, when we find in the February issue of our esteemed British contemporary, *Wireless World*, a rather comprehensive, authoritative discussion of radar by a Dr. R. L. Smith-Rose of the National Physical Laboratory. Inasmuch as the American radio magazine, *Broadcasting*, and the *Chicago Daily Tribune* have reprinted this story in digest form, there is perhaps no harm in saying at this late date that Dr. Smith-Rose defines radar as "the art of using radio waves for the detection and location of an object, fixed or moving, by the aid of the differences of its electrical properties from those of the medium adjacent to or surrounding it."

BEGINNING in this issue we publish the first instalment of a 2-part article on the "Advantages of Original Cost Classification of Plant" by an author who happens to hold the authoritative post of chairman of the committee on depreciation of the National Association of Railroad and Utilities Commissioners. He is ASEL R. COLBERT, chief of the accounts and finance department of the Wisconsin Public Service Commission.

MR. COLBERT has been actively engaged in regulatory accounting work almost since he began to study the subject after his Navy service in World War I. He joined the staff of the Federal Trade Commission in 1928 and worked on the investigation of public utility holding companies and operating companies under the old Walsh resolution. He joined the Wisconsin Public Service Commission staff in 1931 as a special investigator and became chief of its accounts and finance department in 1935, which position he still holds. His activities with the NARUC go back to nearly a decade.

DREW J. DAVID, whose short article on "Radio for Transit Companies" begins on page 358, is a professional writer of Philadelphia, Pennsylvania. LARSTON D. FARRAR, whose article on "Co-ops" under a "Microscope" begins on page 350, is a well-known Washington writer on business affairs who is now representing the Gannett newspapers in the nation's capital.

THE next number of this magazine will be out March 29th.



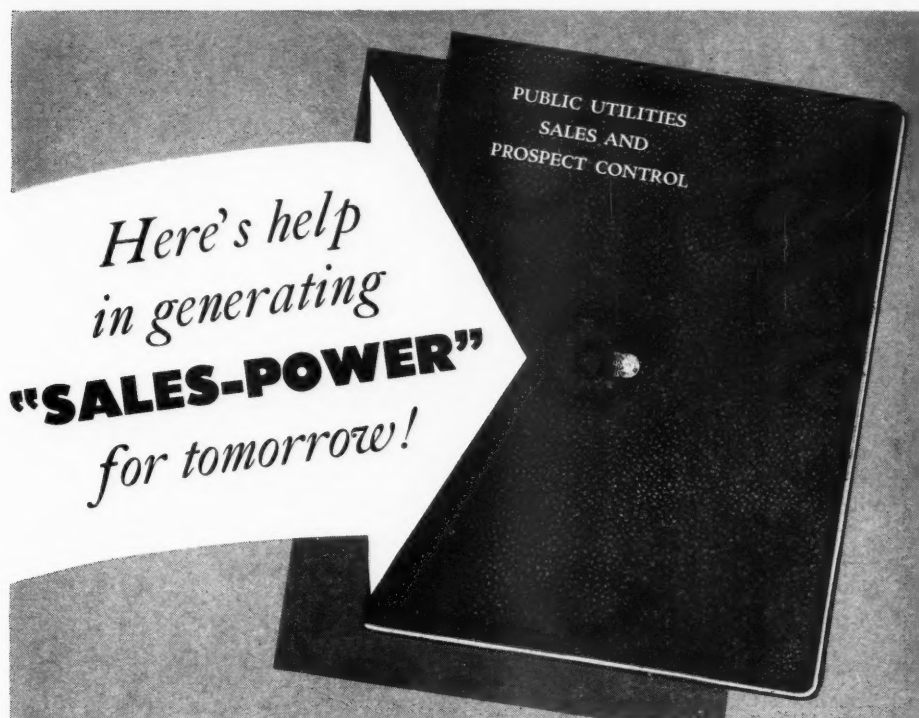
LARSTON D. FARRAR

Does the American co-op really compare with its European counterpart?

(SEE PAGE 350)

MAR. 15, 1945

The Editors



● The extent to which the pent-up demand for appliances is met by utility companies, and the consequent load-building that is achieved, will depend on the force and proper application of well-rounded sales plans conceived now.

Many officials have told us our booklet "A Public Utility Postwar Sales Program" is proving of great value in their planning. This generous welcome has prompted us to go further, and in "Public Utility Sales and Prospect Control" we present the actual record forms required for effective control of sales activities.

Included are sample working systems, with administrative records that provide the factual data on which sound, intelligent, day-to-day control by prospect, by territory and by salesmen can be maintained most easily.

Public utility officials are invited to read this study. It is now available on special ten-day loan service from our Systems Research Data File—on personal request.



ON LOAN . . . FOR STUDY

Systems Division
Remington Rand, Inc.
Buffalo 5, N. Y.

- ☐ Please send me on your ten-day loan service, "Public Utilities Sales and Prospect Control."
- ☐ I would like to have a copy of "A Public Utility Postwar Sales Program."

NAME _____

POSITION _____

COMPANY _____

CITY _____

STATE _____

SYSTEMS DIVISION
REMINGTON RAND
Buffalo 5, New York

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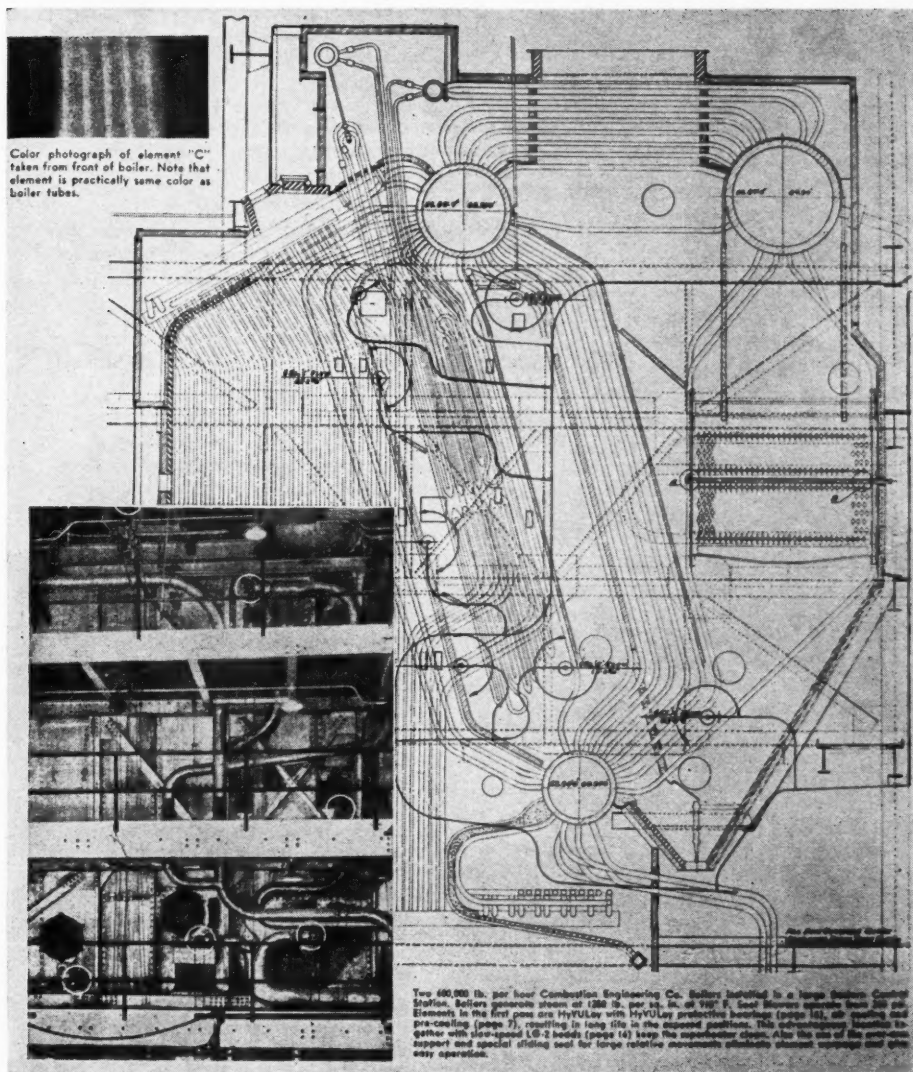
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VULCAN ENGINEERED SOOT BLOWER INSTALLATIONS



The new VULCAN catalog fully describing VULCAN equipment appears in the 1944 Sweets, and a copy is available on your request.

VULCAN SOOT BLOWER CORPORATION, DU BOIS, PENNA.

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Remarkable Remarks

"There never was in the world two opinions alike."

—MONTAIGNE



EDITORIAL STATEMENT
Industrial News Review.

•
CLAUDE R. WICKARD
Secretary of Agriculture.

BERNARD M. BARUCH
Administration adviser.

SUMNER H. SLICHTER
Harvard economist.

ERIC A. JOHNSTON
*President, United States Chamber
of Commerce.*

EDWARD V. RICKENBACKER
Aviation executive.

HUGH H. MCGEE
*Vice president, Bankers Trust
Company.*

KENNETH S. WHERRY
U. S. Senator from Nebraska.

•
HOWARD BRUBAKER
Columnist, The New Yorker.

"The American public spends almost 50 per cent more on cigarettes than on electric service."

✱
"The bulk of the great task of providing enough jobs at sufficient pay must be accomplished by private enterprise."

✱
"If we use half our sense in making peace terms, there will be for many years more work than there will be minds and hands with which to do it."

✱
"For at least two years after the war American industry will have to employ virtually every available worker to catch up on the production of civilian goods."

✱
"The 'golden eggs' of tomorrow are the jobs created by big business enterprises and by little business enterprises which have dreams of . . . one day being big."

✱
"If Russia keeps going to the right, she will wind up as the greatest democracy in the world, and if the United States keeps going to the left, we will wind up where the Russians were twenty years ago."

✱
"Every opportunity should be accorded to private enterprise to operate within the framework of a private financial system before the Federal government steps in to give financial aid."

✱
"The single fact that we need to remember with respect to foreign trade is that exports must be paid for by imports, else we shall give away our goods and be that much poorer. We cannot lend-lease forever."

✱
"The third anniversary of Pearl Harbor was observed in Japan with appropriate ceremonies. The high lights of the program were bad news from Leyte, a bomber raid on Tokio, an earthquake, and a tidal wave."

"We particularly appreciate
BURROUGHS DEPENDABILITY
 today, when mechanical service
 is so very important"

Burroughs' ability to maintain its high service standards during these trying war years didn't just happen! Years ago, Burroughs established a definite service policy in recognition of the fact that any mechanical product can be no better than the service provided for it. Today's experienced, highly-trained service organization is the natural result of this farsighted policy of careful planning, constant study, continuous training and close supervision. It is this typical Burroughs thoroughness which makes it possible to help more and more users keep their precious Burroughs machines in action today.



1st
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 IN COUNSEL
 IN SERVICE

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FIGURING, ACCOUNTING AND STATISTICAL MACHINES • NATIONWIDE MAINTENANCE SERVICE • BUSINESS MACHINE SUPPLIES

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REMARKABLE REMARKS—(Continued)

FREDERICK C. CRAWFORD
*Chairman, National Association of
 Manufacturers Executive Com-
 mittee.*

"Under freedom we can become so productive that we can, at the same time, service our vast war debt, pay it off, and raise our standard of living till the humblest has more security than the privileged today."

WILLIAM BENTON
*Vice president, University of
 Chicago.*

"... for fifteen years the dominant actions of business groups in the field of public policy have been largely 'rear guard' skirmishes. Since 1929 business has done too much howling and too little constructive thinking."

C. E. WILSON
*President, General Motors
 Corporation.*

"The confusion that exists in some people's minds regarding progress is ... due to people who with our increasing standard of living expect a much greater social benefit than the social contribution they are willing or able to make."

JESSE H. JONES
Former Secretary of Commerce.

"We cannot expect business, little or big, to put risk or venture capital to work under a tax system which does not enable the investor of the money to get either a profit on his capital or the opportunity of amortizing his obligations in an orderly way."

DAVID LAWRENCE
Editor, United States News.

"It is not just the Nazis or their destructive philosophy or their inhumane treatment of the innocent which are to be condemned but also the indifference of our generation to the sequence of events and to the conditions which generated this era of bestiality."

WILLIAM A. LYDGATE
*Editor, American Institute of
 Public Opinion.*

"A widely held myth is that the common people always applaud spending of public money on their behalf but oppose levying of taxes against themselves and that their one desire in taxation is to soak the rich. In 1941, the majority were far less prone to soak the rich than was Congress."

EDITORIAL STATEMENT
The Saturday Evening Post.

"What the United Nations need is a general headquarters. Inter-Allied bickering such as we've seen recently calls for a long room with a big table equipped with pads and pencils, ash trays, and glasses of water. Certainly it doesn't belong on radio broadcasts and front pages, to the profit of nobody but the enemy."

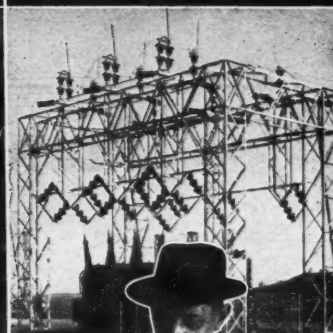
EMIL SCHRAM
*President, New York Stock
 Exchange.*

"Taxes which bear unduly on those who must provide financing are not in the national interest. When there is a flight from risk-taking enterprise into tax-exempt securities, when there is double taxation on the income of business, we have no need to ask whether changes are called for in our tax system, in the interest of the people as a whole."

D E S I G N

W O R K M A N S H I P

S E R V I C E



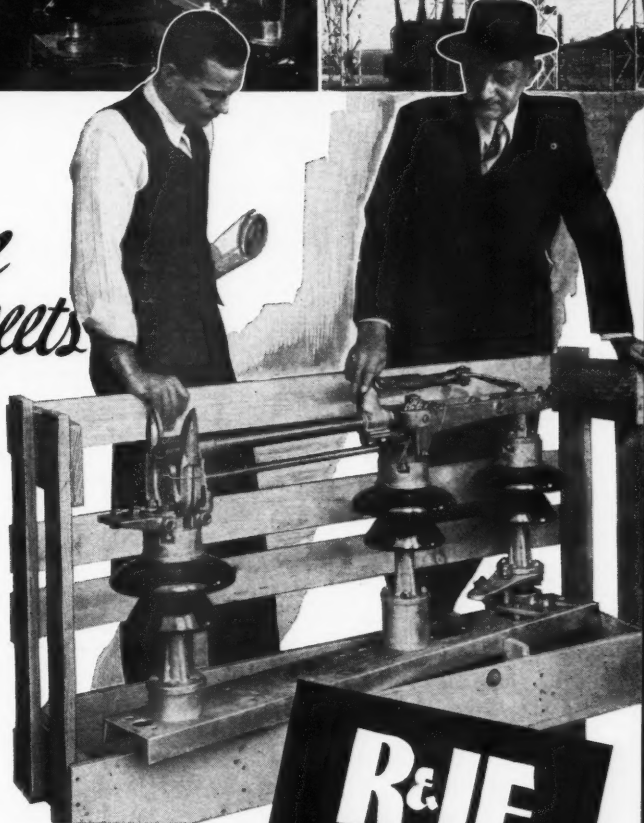
*"There's more
here than meets
the eye"*

"It's a Hi-Pressure Contact Switch, designed and refined by R&IE engineers, who set a new standard in its creation.

"As neat and smart as a switch can look, and still "take it".

"What you don't see here is the constant search for improvement in design and operation. R&IE engineers are never satisfied. They know that spot-pressure, self-cleaning contacts, proper selection of materials and other manufacturing processes are fundamentally right—but, they are continually looking for refinements that will improve on present Quality and Performance. We've been at it for 33 years. In that time, every switch that went out helped establish the margin of quality that distinguishes all R&IE equipment".

★



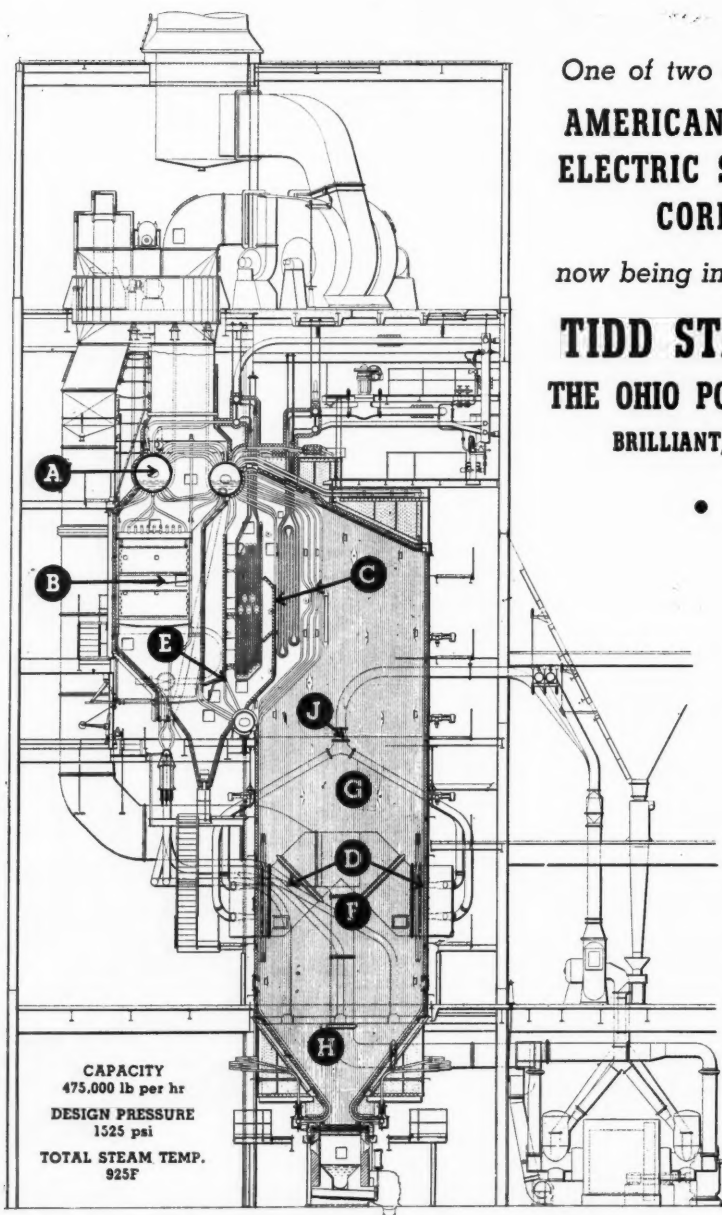
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Present day **TRENDS**



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in **UTILITY** Steam Practice

as reflected in design characteristics of recent C-E Units

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- B** Compact arrangement of economizer in last boiler pass.
- C** Two-stage superheater with widely spaced tubes in first stage permitting low gas velocities and thus minimizing slag accumulation. Boiler and superheater surfaces in this area completely accessible for cleaning.
- D** Vertically adjustable burners permitting control of gas temperatures entering boiler and superheater and providing primary control of superheat temperature.
- E** Bypass damper which, in conjunction with desuperheater, provides final close control of superheat temperature.
- F** Tangential firing providing maximum turbulence and rapid completion of combustion.
- G** Simple, clean-cut furnace of ample volume for low heat release rates and with solid metal surfaces on all sides, top and bottom. All surfaces readily accessible for cleaning.
- H** Completely water-cooled hopper which, in conjunction with adjustable burners, permits full utilization of lower furnace heating surfaces.
- J** Arrangement of mill piping which permits each mill to supply fuel to all four corners of furnace.

A-858A



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A Slight Error of \$100,000

A LEADING rubber company was using a large sheet for its tire factory orders. It carried complete data, formulae for batch mixing, production instructions, etc. Numerous copies of the order were required.

Illegibility of words and figures in some of the copies caused mistakes—a 3 would be mistaken for a 5—a 6 for an 8—batch mixes were spoiled—materials lost—time wasted.

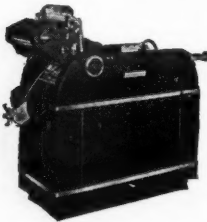
Investigation disclosed that misreading of figures due to faint impression, blurred reproduction or misalignment was costing at least \$100,000 a year.

New Duplicating Methods Stopped Losses

The company installed a Multilith duplicator using a Systemat as the reproducing master sheet for the large factory order form. The Sys-

temat comes to them with the form itself already on it in reproducing ink, and the production specifications are typed or written in directly on the Systemat. Both are reproduced in a single run in any desired number of copies. Each copy is in perfect alignment, each accurate and clear—last copy as legible as the first. Errors have been eliminated, losses stopped.

Multilith Systemat duplicating is a recent development, new to many businesses. It opens up scores of ways in many different departments to revolutionize paper work systems, to lighten monotonous, painstaking repetitive work and save time and money. Find out what it can do for your company. Phone our local office or write the Research and Methods Department of Addressograph-Multigraph Corporation, Cleveland 17. Sales agencies with service and supply departments in all principal cities of the world.



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Multigraph Models from \$150 to \$2,035

Multigraph

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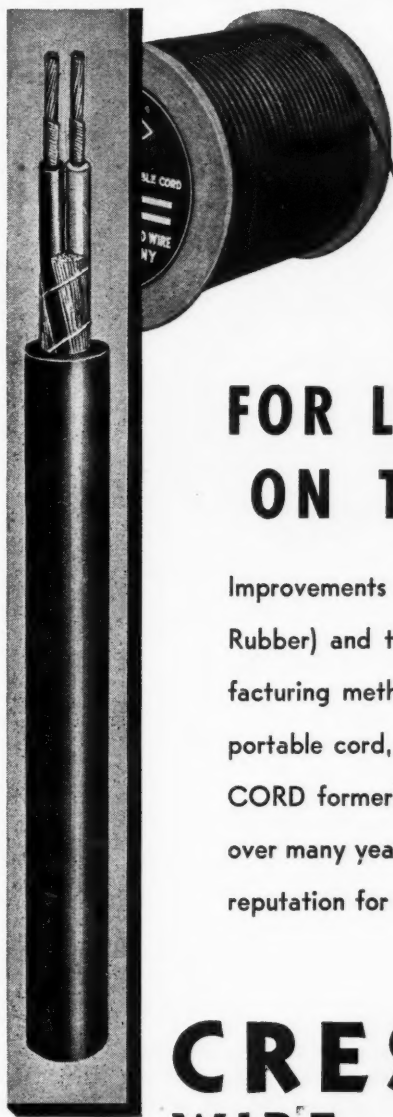
SIMPLIFIED BUSINESS METHODS



Multilith and Systemat are Reg. Trade Marks of Addressograph-Multigraph Corporation

ARMORED CABLE • RUBBER POWER CABLES • VARNISHED CAMBRIC CABLES

WELDING CABLES • CRESFLEX NON-METALLIC SHEATHED CABLE • SERVICE ENTRANCE CABLE



CRESCORD

Rubber Jacketed Portable Cord

FOR LONG SERVICE ON TOUGH JOBS

Improvements in Buna-S (Government Synthetic Rubber) and the development of better manufacturing methods have resulted in an excellent portable cord, comparing favorably with CRESCORD formerly made with crude rubber which over many years had earned such an outstanding reputation for long life.

CRESCENT

WIRE and CABLE



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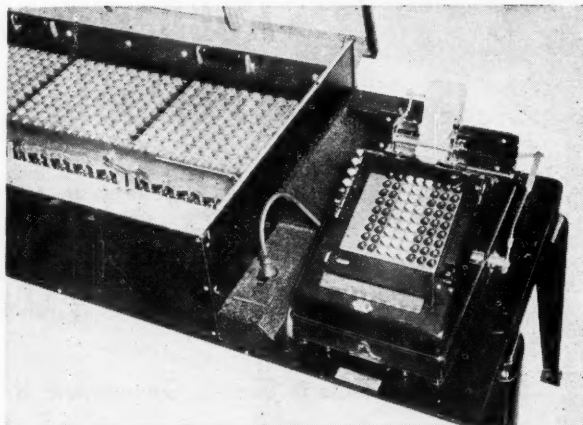
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We will be glad to tell you more in detail about this accurate, rapid and economical method for obtaining a picture of your customer usage situation. Write for a copy of the booklet "*The One Step Method of Bill Analysis*."

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ERECTION and MAINTENANCE OF TRANSMISSION LINES

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22 E

UPKEEP GOES DOWN

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**These 5 advantages of
TRANSITE DUCTS
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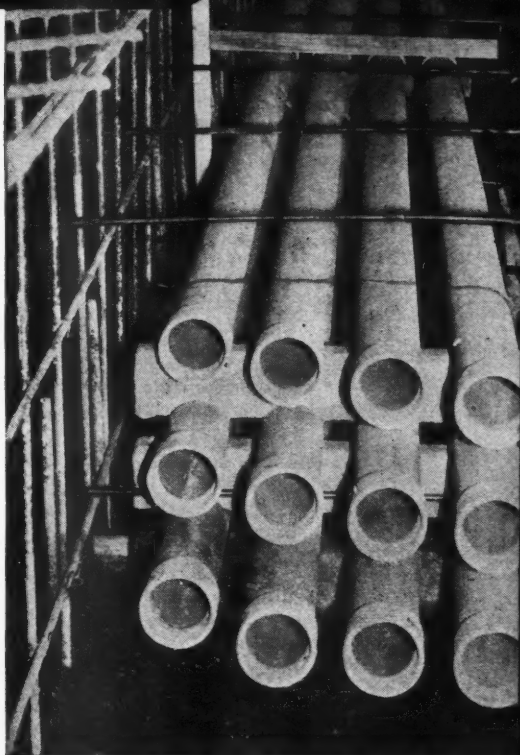
3. Inorganic...made of asbestos and cement compressed under great pressure. This provides permanence and strength...makes these ducts immune to rust and rot.

4. Immune to electrolysis...being entirely inorganic and non-metallic, Johns-Manville Transite Ducts are not affected by electrolysis or galvanic action.

5. Incombustible...won't contribute to the formation of dangerous smoke, gases, or fumes. If burnouts do occur, these inorganic ducts provide maximum protection to adjacent cables and permit easy removal of damaged conductor.

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TRANSITE KORDUCT above—for installation in concrete. Thinner-walled but otherwise identical with Conduit.

TRANSITE CONDUIT—for exposed work and for use underground without a concrete encasement.

TRANSITE DUCTS





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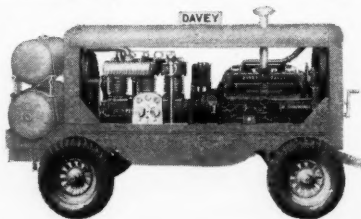
Take a chassis built to endure the shocks and jolts of hard service year in and year out, add an amazingly economical, ruggedly-built air-cooled compressor that operates at conservative speed, and you have the DAVEY Air-Cooled Portable Compressor.

Cost-wise contractors and dealers who lease out equipment know a DAVEY can really take it and still keep going year after year with minimum maintenance and maximum efficiency. That's why many rental fleets are 100% Davey Compressors.

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COMPRESSORS

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MINE RAILWAY
COMPRESSORS

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AUTO-AIR
COMPRESSORS

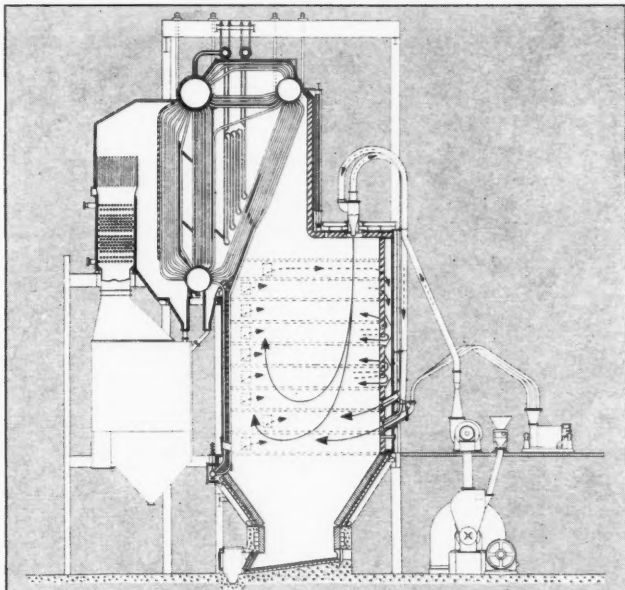
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Sectional drawing of a 175,000 lb. per hr. high efficiency steam generator which operates on pulverized anthracite. This is one of two duplicate units recently installed in a large eastern paper mill.



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BURNING ANTHRACITE FINES

• Three steam generators fired with pulverized anthracite have been continuously operated for several years in two prominent boiler plants. Fuel costs of the unit located nearer the anthracite fields are 50% less than if bituminous was fired, while the other installation, situated at greater distance from the mines, effects a corresponding saving of 20%.

For many years "bin" storage systems were necessary adjuncts when burning pulverized anthracite. Fuel characteristics plus limitations in the pulverizing equipment made these complex and expensive applications necessary for safe and continuous operation.

Then came the Foster Wheeler "unit" system for pulverized anthracite. Specially de-

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For more than seven years pulverized anthracite has been successfully fired in Foster Wheeler "unit systems." Commercial operating records of the seven units already in service show uniformly economic and efficient performance.

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"SERVICE-ABILITY"—
it's a new word. But it most exactly
describes CLEVELAND TRENCHERS

• Many "Clevelands" built 15 to 20 years ago are still on the job today doing their part to ease the manpower shortage. • Although out-moded by "Cleveland's" modern standards of performance, this evidences the soundness and correctness of the basic design pioneered by Cleveland. • It also tells the story of "Cleveland's" policy of rendering prompt repair parts service even on these old machines. • This kind of service and this kind of ability are two more reasons why "Clevelands" continue to be the profitable long range investment in the trenching machine field. Guarantee yourself this "Service-Ability" in your Post-War trenching jobs by using Clevelands.



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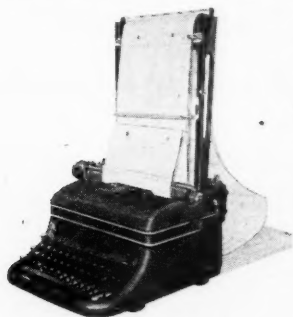


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THE UTILITY INDUSTRY

and the

WAR



EGRY SPEED-FEED may be attached to any standard make typewriter in one minute, and with Egrý Continuous Forms, doubles the output of the operator—makes one machine do the work of two.



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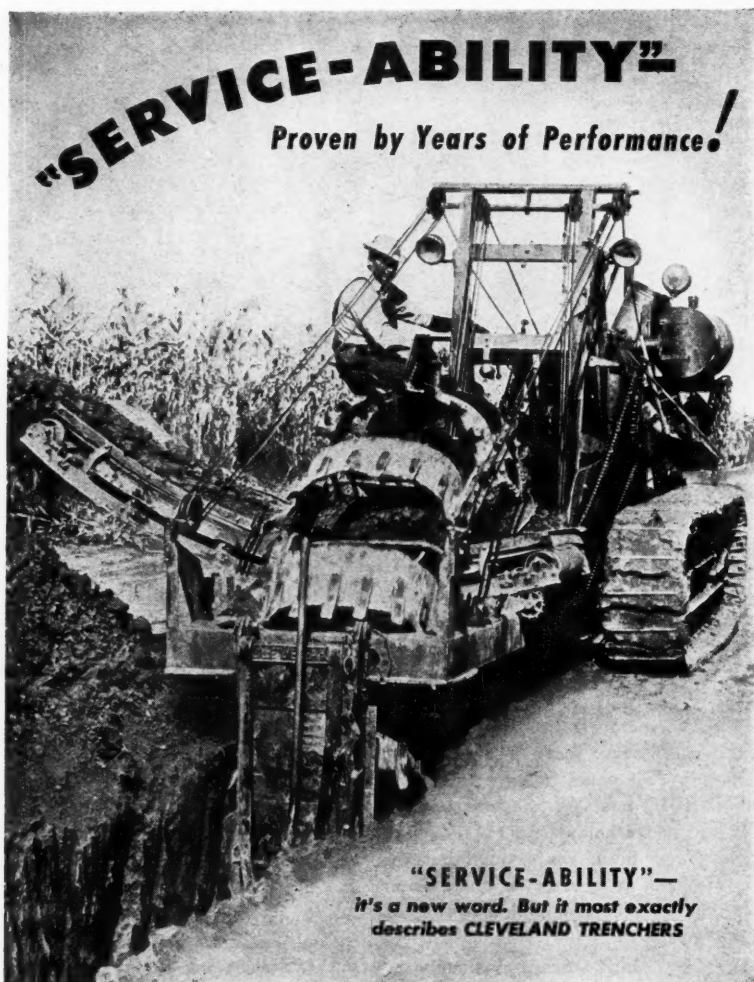
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• Many "Clevelands" built 15 to 20 years ago are still on the job today doing their part to ease the manpower shortage. • Although out-moded by "Cleveland's" modern standards of performance, this evidences the soundness and correctness of the basic design pioneered by Cleveland. • It also tells the story of "Cleveland's" policy of rendering prompt repair parts service even on these old machines. • This kind of service and this kind of ability are two more reasons why "Clevelands" continue to be the profitable long range investment in the trenching machine field. Guarantee yourself this "Service-Ability" in your Post-War trenching jobs by using Clevelands.



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"CLEVELANDS" Save More... Because they Do More

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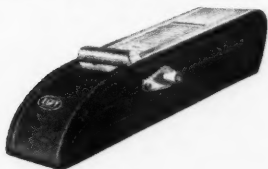
THE UTILITY INDUSTRY

and the

WAR



EGRY SPEED-FEED may be attached to any standard make typewriter in one minute, and with Egr Continuous Forms, doubles the output of the operator—makes one machine do the work of two.



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There's no question but what the utilities have played a major part in the successful prosecution of the war. Any breakdown or serious interruption in this industry could easily have proved disastrous. But, thanks to American proficiency, no such emergency has arisen. Here at Egr we like to feel we have contributed to the utilities' effort in the war by supplying many of them with Business Systems that speed the writing of handwritten and typed records . . . that take the drag out of office routine . . . that help turn out more work in less time, with less office equipment and fewer employees. ¶ If you are not acquainted with Egr Business Systems and their possibilities, investigate NOW! You can best judge their usefulness by seeing them in action right in your own office. We will be glad to arrange a demonstration at your convenience. There's no cost or obligation. Address Department F-315.

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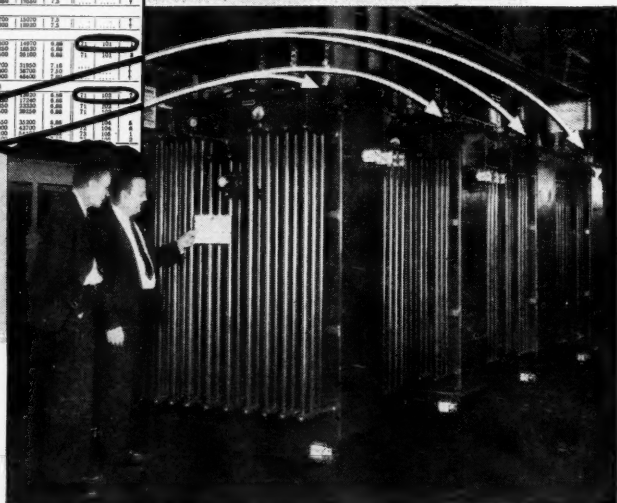
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ICE-DR-COOLED		ONE APPROXIMATE WEIGHT AND DIMENSIONS, LBS.	
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Saved **DOLLARS and MAN-HOURS**



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RM-listed power transformers are now available for circuits 66,000 volts and below; 667 to 5000 kva, single-phase; 750 to 10,000 kva, three-phase.

these listed types saves time and materials in manufacture, helps us to deliver *more transformer value* per dollar, and with less likelihood of delay. In the long run, repetitive manufacture means lower apparatus prices, and lower investment costs for you.

In the future, we expect to expand the range of power apparatus available in "RM-listed" types and sizes. You'll find that it pays to make "Repetitive Manufacture" your choice whenever possible. *General Electric Company, Schenectady 5, N. Y.*

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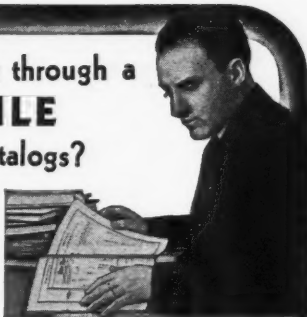
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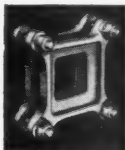
in the COMPLETE line

If you have a Penn-Union Catalog, you can instantly find practically every good type of conductor fitting. These few can only suggest the variety:



Universal Clamps to take a large range of conductor sizes; with 1, 2, 3, 4 or more bolts.

L-M Elbows, with compression units giving a dependable grip on both conductors. Also Straight Connectors and Tees with same contact units.



Bus Bar Clamps for installation without drilling bus. Single and multiple. Also bus supports—various types.

Clamp Type Straight Connectors and Reducers, Elbows, Tees, Terminals, Stud Connectors, etc.



Jack-Knife connectors for simple and easy disconnection of motor leads, etc. Spring action—self locking.

Vi-Tite Terminals for quick installation and easy taping. Also sleeve type terminals, screw type, shrink fit, etc. etc.



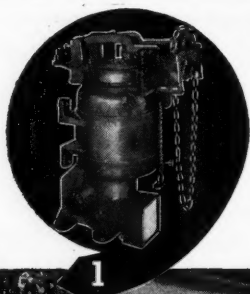
Splicing Sleeves, Figure 8 and Oval, seamless tubing—also split tinned sleeves. High conductivity copper; close dimensions.

Preferred by the largest utilities and electrical manufacturers—because they have found that "Penn-Union" on a fitting is their best guarantee of Dependability. Write for Catalog.

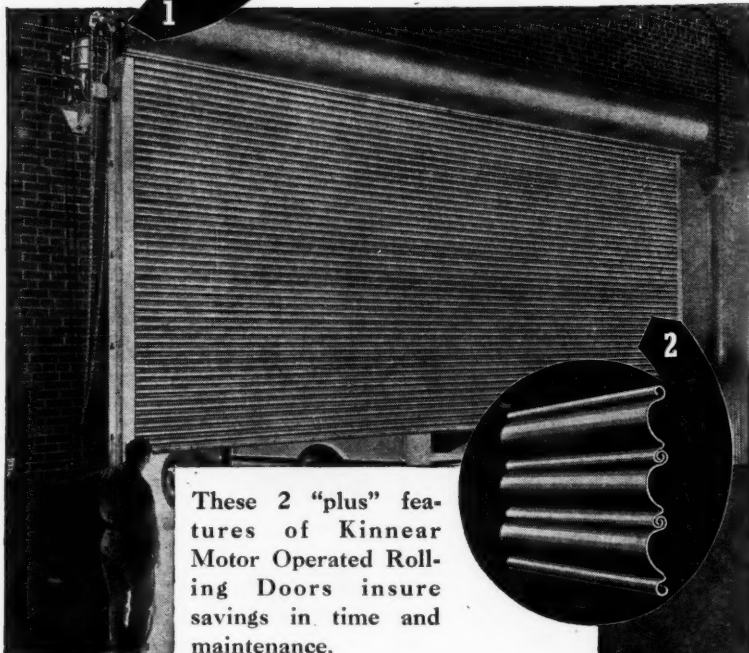
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ERIE, PA. Sold by Leading Jobbers

PENN-UNION
CONDUCTOR FITTINGS

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2 BIG REASONS for KINNEAR DURABILITY and EFFICIENCY



These 2 "plus" features of Kinnear Motor Operated Rolling Doors insure savings in time and maintenance.

1. The heavy duty power unit that goes instantly into operation when you touch the control button. Remote control switches may be located at any point.

2. The rugged but *flexible* interlocking steel slats—originated 46 years ago by Kinnear—and still giving carefree service in many doors after 20, 30 and 40 years of continuous use.

In addition, Kinnear Rolling Doors open out of the way, save wall and floor space, clear ground obstructions and, when closed, provide an all-metal barricade. Built to fit any opening—any size—for old or new buildings. Write: The Kinnear Mfg. Co. Factories: 2060-80 Fields Ave., Columbus 16, Ohio and 1742 Yosemite Ave., San Francisco 24, Calif.

**SAVING WAYS
IN DOORWAYS**

KINNEAR
ROLLING DOORS

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[illegible]

Mr. Horace R. Frye (left), Assistant Supt. Water Works, and Mr. B. W. Peters, Foreman Meter Shop, Evanston, Illinois.



Meter Department

THE City of Evanston, Illinois, has found that there is far more to the practical operation of a meter shop than repairing and testing. There must be intelligent observation of meters, and complete records kept accurately and continuously. It is only in this way that maximum revenue and minimum charges can be obtained.

With the help of their meter shop records, Evanston has been able to:

- (1) increase the percentage of water accounted for (*Evanson accounts for 89.5% of its pumpage thru customers' meters. Water used for sewer and hydrant flushing and for fire is included in the remaining 10.5%*)
- (2) determine the length of time to leave meters in service before removal for periodic inspection and repair, and
- (3) help determine meter values.

Trident representatives, familiar with practical meter shop operation, will be glad to help you with your inspection and repair program.

117

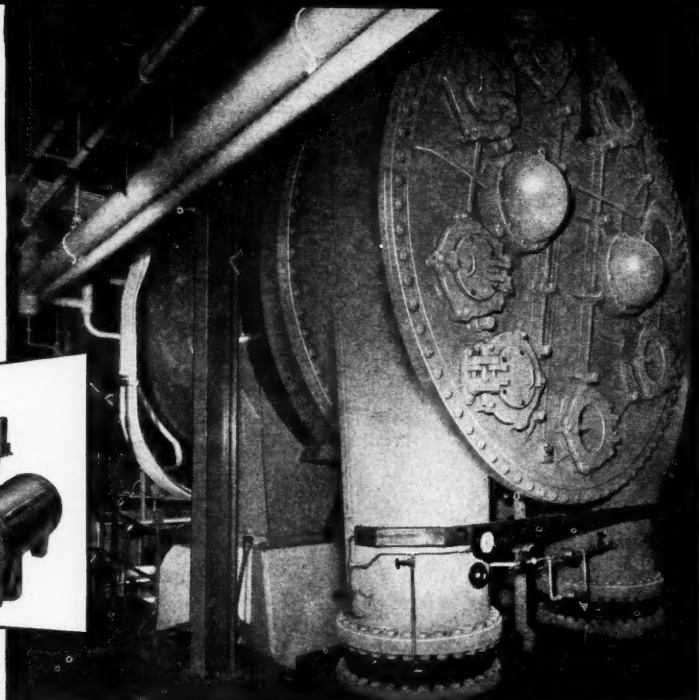
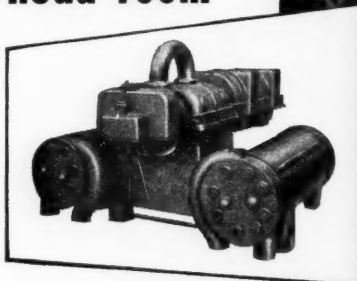
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Branch Offices in CHICAGO, SAN FRANCISCO, LOS ANGELES, PORTLAND, ORE.
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TWIN CONDENSERS for low head room



How an unusual condition was met with **CONDENSERS** by **ELLIOTT**

The photograph shows one side of a twin 60,000-sq. ft. Elliott condenser which serves a 65,000-kw turbine-generator, first unit in the new Harbor Steam Plant of the City of Los Angeles. The picture of the model which was made for study before the plant was built shows the arrangement of the turbine-generator with the twin condensers on either side, the units being joined by a special exhaust connecting piece. The twin arrangement of the condenser was desirable for several reasons, one of which was rigidity and low center of gravity, vital in designing the turbine foundations to withstand possible earthquake tremors.

The arrangement gives a low broad

foundation to carry both turbine-generator and condenser and allows solid bolting of the condenser on its foundations instead of spring supports, differential expansion being taken care of by rubber fabric expansion joints between each condenser and the connecting piece.

Each condenser is served by a triple two-stage steam jet ejector and there are two additional single-stage ejectors for quick startup purposes.

The entire installation is typical of the successful solution to unusual problems resulting from the able cooperation of Elliott engineers.



C-384

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Heat Transfer Dept., JEANNETTE, PA.
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Utilities Almanack

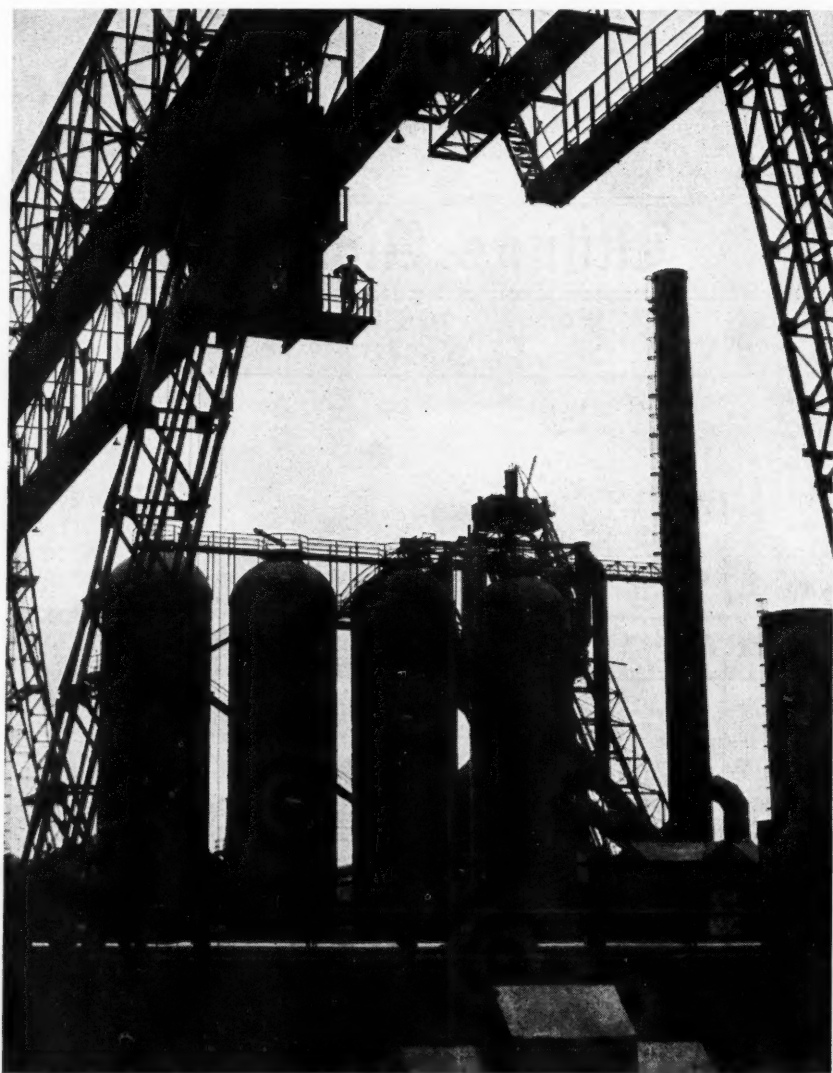
Due to wartime travel restriction, conventions listed are subject to cancellation.



MARCH



15	T ^h	† Kansas Telephone Association starts meeting, Topeka, Kan., Mar., 1945.	
16	F	† Iowa Independent Telephone Association will hold session, Des Moines, Iowa, Apr. 3, 4, 1945.	
17	S ^a	† Missouri Valley Electric Association will hold engineering conference, Kansas City, Mo., Apr. 4-6, 1945.	
18	S	† American Water Works Association, Ohio Section, will hold meeting, Columbus, Ohio, Apr. 5, 6, 1945.	
19	M	† American Water Works Association, Southeastern section, starts meeting, Montgomery, Ala., Mar. 1945.	
20	T ^u	† Midwest Gas Association will convene, Omaha, Neb., Apr. 9, 1945.	☺
21	W	† American Water Works Association, Montana Section, will convene, Lewiston, Mont., Apr. 13, 14, 1945.	
22	T ^h	† Southeastern Electric Exchange, Engineering and Operation Section, starts meeting, Atlanta, Ga., Mar., 1945.	
23	F	† American Society of Mechanical Engineers will hold spring meeting, Boston, Mass., Apr. 16-18, 1945.	
24	S ^a	† Southwestern Gas Measurement Short Course will be held, Norman, Okla., Apr. 17-19, 1945.	
25	S	† American Bankers Association, will hold administrative committee meeting, New York, N. Y., Apr. 15, 16, 1945.	
26	M	† Edison Electric Institute Technical Committee will meet, Chicago, Ill., Apr. 20-May 2, 1945.	
27	T ^u	† American Water Works Association, New York Section, will convene, Elmira, N. Y., Apr. 19, 20, 1945.	
28	W	† AGA Industrial and Commercial Gas Conference will hold meeting, Toledo, Ohio, Mar. 29-30, 1945.	☺



H. Armstrong Roberts

A Giant Still Life

Public Utilities

FORTNIGHTLY

VOL. XXXV; No. 6



MARCH 15, 1945

Advantages of Original Cost Classification of Plant

PART I

In the light of experience such classification is, in the opinion of the author, the most practical procedure for recording the cost of properties purchased as entireties, either in the past or of those which may be acquired in the future.

By ASEL R. COLBERT

FOR a number of years utilities have been required to classify their investment in plant so as to show original cost of the property to the person first devoting it to public service. This requirement originated with certain state commissions and the accounting committee of the National Association of Railroad and Utilities Commissioners and was subsequently adopted by Federal Communications Commission, Federal Power Commis-

sion, and many state commissions.

In an article criticizing accounting policies of the Federal Power Commission, William A. Paton¹ states:

I have searched diligently, but have failed to find a single clear-cut statement which indicates that the disclosing of predecessor cost on the books of the present owner serves any accounting purpose whatsoever. As a general proposition any such scheme falls of its own weight.

¹ "Accounting Policies of the Federal Power Commission—A Critique." *The Journal of Accountancy*, June, 1944.

PUBLIC UTILITIES FORTNIGHTLY

And, again, Paton states as follows:

However, I think it is desirable to make it entirely clear that there is no shred of support in the field of established accounting principles or practices for this novel procedure required by the commission. If it has support it must be found elsewhere.

Mr. Paton makes such a sweeping indictment of the original cost requirements of systems of accounts prescribed generally by utility commissions that an explanation of the procedure from a regulatory viewpoint is appropriate. Perhaps accountants engaged in regulatory functions have been negligent in not furnishing a clear-cut statement of the objectives of original cost requirements. Perhaps we have been so close to utility accounting and regulatory matters that the benefits of original cost data were so obvious to us that we did not realize that there were those in public accounting and teaching professions who did not perceive these advantages. However, such lack of perception of the purposes and usefulness of original cost data is probably characteristic of only a minority of public accountants. It is known that certain nationally known firms of public accountants were well informed in this respect and often prepared exhibits of original cost in rate cases and gave testimony thereon many years prior to the adoption of present regulations requiring maintenance of original cost data.

It is the purpose of this article to explain the provisions for accounting for cost of utility plant prescribed by the uniform system of accounts,² to ex-

plain the classification required to record original cost of plant, and to show that such classification is in accordance with proper accounting standards and is of substantial benefit for administrative, financial, and regulatory purposes.

Accounting Is on Cost Basis

AT the outset, it should be understood that the system of accounts provides that all transactions involving plant shall be recorded in the accounts at cost. Cost is defined as "the amount of money actually paid for property or services or the cash value at the time of the transaction of any consideration other than money." All property constructed by the utility (or acquired by it if less than an operating unit or system) is chargeable to the appropriate plant accounts at cost.

When property constituting an operating unit or system is acquired, the cost to the utility, as above defined, is recorded in the accounts. This cost is then classified so as to show (a) the original cost of the property defined as "the cost of the property to the person first devoting it to public service," and (b) the difference between such original cost, as defined, and the cost to the present owner, after giving effect to any depreciation or amortization on the properties acquired recorded by the purchasing utility at the time of acquisition. Such difference is recorded in Account 100.5, Utility Plant Acquisition Adjustments. The original cost of the properties acquired is recorded in the detailed plant accounts indicative of the nature of the plant.

Thus, the original cost procedure is not a new or novel method of accounting but is solely a classification of cost

² The FPC system of accounts for electric utilities will be referred to herein because of its general applicability and the general familiarity with it. The Wisconsin system, and those of many other state commissions, is identical in so far as the original cost provisions are concerned.

ADVANTAGES OF ORIGINAL COST CLASSIFICATION OF PLANT

of properties acquired as operating units or systems. The *cost* of a utility's property is absolutely unaffected by any provision of the original cost classification.

All that is done is to record part of the cost in certain accounts and the balance in another.

DIFFERENCES of opinion as to what constitutes *cost* are evident from the testimony in a number of cases involving reclassification of plant in accordance with the FPC system of accounts.

Some of the authors most critical of original cost classification, including Mr. Paton, are persons who have testified in behalf of utilities in these cases. The controversies which developed regarding accounting principles governing *cost* determinations seem to have influenced their views regarding original cost classification. This is regrettable because determination of *cost* of utility plant is solely unrelated to original cost classification requirements, and differences of opinion would have arisen upon classification of undistributed plant investment under prior systems of accounts. The system adopted by the National Association of Railroad and Utilities Commissioners in 1922, and prescribed widely by

state commissions, provided, with reference to plant and equipment purchased as a whole, that "where the consideration given for property purchased is other than cash, such consideration shall be valued on a current cash basis. If the consideration includes the assumption of liabilities, such liabilities shall be included in the determination of the cost at their cash value at the time the contract is made." Note the similarity between the provision of the current system that "cost means the amount of money actually paid for property or services or the cash value at the time of the transaction of any consideration other than money."

FURTHER, the 1922 NARUC system provided that "a bona fide contract or agreement of purchase and sale between *entirely separate parties* shall be *prima facie* evidence of actual cost"; and that "these instructions should not be interpreted as permitting the addition to fixed capital accounts of arbitrary percentages to cover assumed overhead costs, but only as requiring the assignment or apportionment to particular accounts for tangible property of *actual and necessary* overhead expenditures." (Italics supplied.)

To one familiar with the previous



Q "WHEN *property constituting an operating unit or system is acquired, the cost to the utility . . . is recorded in the accounts. This cost is then classified so as to show (a) the original cost of the property defined as 'the cost of the property to the person first devoting it to public service,' and (b) the difference between such original cost, as defined, and the cost to the present owner, after giving effect to any depreciation or amortization on the properties acquired recorded by the purchasing utility at the time of acquisition.*"

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status of plant accounts of many utilities and the requirements of the 1922 system of accounts, it is evident that classification of undistributed plant investment in accordance with the terms of that system would have brought forth the same disagreements regarding *cost* of plant as have arisen under the present system. These would have included differences of opinion regarding reaccounting for overheads, inter-company profits, affiliated company service fees, and the cost when a mixed aggregate of property is acquired for securities.

It is not my purpose to discuss these or other factors bearing on determination of *cost* because they are unimportant in considering the merits of classification of plant to show original cost. The new systems simply require that after *cost* of plant is determined, that *cost* be classified to show the original cost to the person first devoting the plant to public service and that any difference between actual cost and original cost be shown in a separate account.

Original Cost Most Practical for Classification of Prior Plant Acquisitions

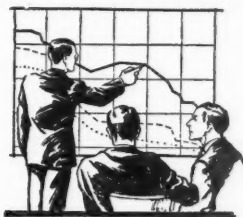
IN 1936, when National Association of Railroad and Utilities Commissioners and Federal Power Commission adopted systems of accounts for electric utilities, it was not unusual to find as much as 50 per cent, or more, of a utility's plant investment carried in a single account entitled "fixed capital not classified by prescribed accounts" or "cost of plant and equipment purchased." These unclassified amounts had originated, to a substantial extent, either at the time of organization of the utility or upon pur-

chase of going utilities when properties were acquired for lump sum considerations.

In accordance with systems of accounts previously prescribed, such undistributed amounts of plant investment should already have been classified. The system of accounts for electric utilities adopted by National Association of Railroad and Utilities Commissioners in 1922 provided that Account 358, Cost of Plant and Equipment Purchased, "shall be used only as a clearing account in which temporarily to carry the cost of plant and equipment purchased for a lump sum until such time as a plan for distributing such cost to the primary accounts appropriate to the property is approved by the regulatory commission." But regulatory agencies had been lax in requiring classification, and utilities had been growing so rapidly, both through new construction and purchases of going utilities, that plant classification did not receive the attention it merited. Hence, unclassified plant investment became general in the electric utility industry. Such condition of plant records was objectionable to all accountants—whether employed by utilities, by regulatory agencies, or engaged in public practice—since under such circumstances a satisfactory classification of plant or complete verification of retirements or of plant in service could not be made.

THIS was the situation when the committee on statistics and accounts of the NARUC commenced the preparation of new systems of accounts. Obviously, an important matter to be covered by the revised systems was specific instructions for clas-

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Original Cost Procedure

"... the original cost procedure is not a new or novel method of accounting but is solely a classification of cost of properties acquired as operating units or systems. The cost of a utility's property is absolutely unaffected by any provision of the original cost classification. All that is done is to record part of the cost in certain accounts and the balance in another."

sification of undistributed plant investment. The method selected by the committee, and which has later been incorporated in systems of accounts used generally throughout the country, was to classify the cost of properties acquired as going concerns between the original cost to the person first devoting the property to public service and the difference between that original cost and cost to the utility, such difference being includible in an account called "utility plant acquisition adjustments." Expressed in another way, the detailed classification to plant accounts for land, buildings, etc., was required to be on the basis of original cost with the acquisition adjustments account being charged or credited with any difference between (a) the total cost to the utility, and (b) the total original cost determined, less any depreciation or amortization on the acquired properties recorded by the purchaser at date of acquisition.

Most purchases of going utilities have been for lump sum considerations, frequently involving payment in securities. In these circumstances, any classification of cost requires an allocation procedure. Such allocation could have been required, based on the use of appraisals. Let us explore the possibilities of such an approach and see what would have been involved.

APPARENTLY, Mr. Paton believes that detailed inventories and appraisals of properties were practically always made before purchase. He says "that when a company buys an operating property it is necessary to have available a complete inventory of all physical resources in order to proceed intelligently. This is necessary even if the total price paid for the aggregate property is viewed as the present value of the stream of operating income and other returns which are anticipated. No reasonable determination of earn-

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ing power is possible without full knowledge of the depreciable plant and other facilities which will be required in the production of the estimated gross revenues. As I pointed out in my 'Advanced Accounting,' a careful and complete appraisal of all physical resources is a major and indispensable step in the valuation of a business enterprise as a going concern."

My experience is that most purchases of going utility properties have been made without any detailed inventory and appraisal of the units of physical property. This applies not only to past but to current acquisitions as well. There is at the present time an application filed before the Wisconsin commission for approval of the purchase of all the property of a utility for approximately \$850,000. No detailed inventory and appraisal of the units of physical property were necessary in order for the utility to act intelligently in the purchase negotiations for the property.

ON acquisitions in the past the amount of gross revenues a property was producing, the possibilities for development in the territory, the type of load, the location of the property in relation to the acquiring utility's system, the general character of the property, and other factors having a broad relationship to the transaction were generally considered of much greater significance than a detailed itemization and pricing of the units of physical plant involved.

If systems of accounts had required plant to be classified on the basis of appraisals, they would have had to be made retroactively. Further, not only would reproduction cost new estimates

have been required but accrued depreciation would also have had to be estimated as of the date of acquisition. This is frequently ignored by those who advocate an appraisal process for classifying cost of acquired properties. It is quite apparent, however, that in the purchase of a mixed aggregate of tangible depreciable properties the percentage of accrued depreciation on each of the property items will not be the same. Hence, if the total cost were distributed on the basis of an appraisal, the depreciated values must be utilized for such allocation process.

In many instances, substantial amounts of prior property acquisitions had already been retired so that retroactive estimates of accrued depreciation at date of acquisition would have been difficult. In fact, those who maintain that a physical inspection is necessary to determine accrued depreciation would have said it was impossible, for how could you inspect something that no longer existed? Unquestionably, any such requirement would have brought forth a clamor of criticism.

IF an appraisal process had been adopted for use in classifying cost of plant it would have resulted in that part of a utility's plant investment comprised of the purchase of going concerns being stated on the basis of reproduction cost new less depreciation at date of acquisition (or a proration downward of such amounts to cost) whereas the property the utility had constructed would be stated on a cost new basis. This condition would have prevailed unless utilities had been required to credit depreciation reserve with the accrued depreciation at the date of acquisition on properties ac-

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quired. Since this practice had not been generally followed by utilities, it would have resulted in at least a partial retroactive application of depreciation concepts. This appeared inadvisable in view of the long history of retirement reserve accounting followed by utilities.

An appraisal procedure for allocating the unclassified cost of plant would not only have been costly; it would have contributed to dissension and drawn-out formal proceedings. Agreements between utilities and commissions concerning the classification would have been difficult because reproduction cost new estimates vary considerably, dependent on the particular hypotheses adopted in making the estimate; and regarding accrued depreciation, agreements would have been even more difficult because of wide divergence of opinions regarding the proper basis of estimates of accrued depreciation.

OF course, the expense of making retroactive appraisals, and the arguments their use would have evoked, could have been ignored and the unclassified cost to the utility of its property could have been required to be distributed by an appraisal procedure. But the classification would not have been uniform as in that event portions of the detailed plant accounts

would have been stated at reproduction cost new less accrued depreciation at date of acquisition, other portions at reproduction cost new without deduction for accrued depreciation, other portions comprised of reproduction cost new minus depreciation prorated downward to actual cost, and still other portions (company construction) at cost to the person first devoting the property to public service. Such a classification would have been an improvement over the status of records containing substantial undistributed plant investment at the time the new systems of accounts were formulated. But it was neither the best nor the most practical classification of costs obtainable under accounting processes.

Original cost, as defined in the systems of accounts, was available in many instances from records of the predecessor owner of the property or from sworn reports which were on file with regulatory agencies. These records were frequently in possession of the present owner. In fact, since adoption of the 1922 NARUC system of accounts, utilities generally were required, in connection with purchases of going concerns, to procure all existing records and accounts or certified copies thereof in possession of the seller relating to construction and improvement of its plant. Hence, ascertainment of original cost was known to require less



Q "... unclassified plant investment became general in the electric utility industry. Such condition of plant records was objectionable to all accountants—whether employed by utilities, by regulatory agencies, or engaged in public practice—since under such circumstances a satisfactory classification of plant or complete verification of retirements or of plant in service could not be made."

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time and expense than an appraisal procedure.

FURTHER, classification on an original cost basis permitted the detailed plant accounts to be stated on a uniform basis—the cost to the person first devoting the property to public service. As a practical matter, this is substantially the same as original cost of construction³ although there are exceptions in the case of property not previously used in utility service which might be acquired, as, for example, the purchase of a building for office use. Therefore, to a substantial extent, the detailed plant accounts, when stated at original cost, conform closely with actual construction cost new.

There are instances where determination of original cost has been no small task and substantial expenses have been incurred. But these cases involved less cost than if an appraisal procedure had been required. In fact, the cases involving most expense have been those in which an attempt has been made to ignore accounting records and to substitute an appraisal for original cost of plant. However, even if all other costs were the same, the fact that studies of accrued depreciation on properties acquired in the past are not required under the original cost procedure means that less cost in reclassification is incurred than if an appraisal procedure which requires estimates of accrued depreciation at acquisition had been required by the accounts.

³ The first system of accounts employing the original cost concept issued by the Wisconsin commission, effective January 1, 1932, used original cost as the cost of constructing and installing plant. This was changed to the present definition to avoid "going back to the days of the Indians" on small portions of plant.

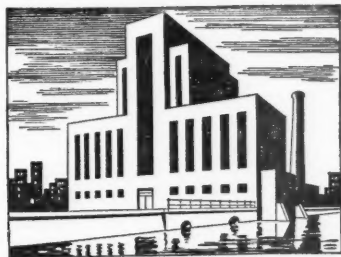
Advantages in Classification of Future Acquisitions

IN the future when both the purchasing and the selling utility carry their plant at original cost, the purchasing utility may record the acquisition of property by (a) carrying over the original cost of the plant as recorded in the accounts of the selling utility, (b) setting up the depreciation reserve requirement applicable thereto,⁴ and (c) recording the difference between purchase price and depreciated original cost in utility plant acquisition adjustment. The only special study necessary is in connection with the depreciation reserve requirement, and the work involved in such a study will become gradually less as further improvement occurs in continuing property records and as depreciation reserves of utilities become reasonably representative of reserve requirements.

It is true that if a detailed analysis of the nature of amounts includible in utility plant acquisition adjustments is desired, then further work will be necessary. But an immediate classification of plant can be made and plant accounting routines carried on without any disturbance because of the property acquisition. Any analysis to ascertain the nature of the adjustment account can follow.

Generally speaking, the value of such an analysis must be balanced against its cost. One procedure would be to make a reproduction cost new appraisal and determination of accrued depreciation. But, even this is not conclusive

⁴ Recording of reserve requirement applies only to future acquisitions. On those prior to the adoption of the system of accounts, only the depreciation recorded by the purchaser, if any, is considered.



Inclusion of Purchased Property

“WHEN purchased properties are recorded in the detailed plant accounts at original cost (which for most property is original cost of construction) and distributed to the appropriate years of installation involved, the units of purchased properties are stated at construction cost new as are those constructed by the utility. Hence, the inclusion of the purchased property does not disturb unduly the average unit costs for the various years of construction.”

unless there is positive proof that the price paid for the tangible property was reproduction cost new less depreciation.

IT is necessary to know also what kind of reproduction cost new may have been considered—reproduction cost of existing plant or the cost new of modern substitute equipment. With these uncertainties in mind, it seems probable that on future acquisitions agreement on the composition of the adjustment account can be reached between the purchaser and the regulatory agency without resort to expensive reproduction cost new appraisals. This should be particularly true where statutes, as in Wisconsin, require authority of the state commission before a utility may buy or sell its property. With knowledge of the facts as to original cost of the property and the

dates of its construction, the depreciation reserve requirement applicable thereto, the changes in price levels that may have occurred, and the total purchase price, it is not difficult to estimate reasonably accurately the nature of any acquisition adjustment arising on conveyance of properties.

It seems safe to say that use of original cost and the adjustment account in classifying the cost of future property acquisitions is a practical method of accounting which will save expenses for the utilities and for the public as contrasted with any scheme which makes mandatory an appraisal of all property acquired in order to classify its cost.

Original Cost and Continuing Property Records

MANY utilities are keeping, or are in process of establishing, con-

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tinuing property records, and in some jurisdictions such records are required by the state commission. The type of continuing property record varies considerably between utilities or commissions, but the basic purpose is to establish coordination between the units of physical property and the dollars of original cost associated therewith. The record will normally show the number, cost, and location of units of property. For some classes of plant an age distribution of property units and their cost is also maintained. For example, the number of poles of a given size may be classified according to year of installation, and retirements recorded at the average cost of such year's installations.

When purchased properties are recorded in the detailed plant accounts at original cost (which for most property is original cost of construction) and distributed to the appropriate years of installation involved, the units of purchased properties are stated at construction cost new as are those constructed by the utility. Hence, the inclusion of the purchased property does not disturb unduly the average unit costs for the various years of construction.

CONSIDER the result if units of property purchased are acquired at a cost in excess of reproduction cost new less depreciation and that the latter is recorded in the detailed plant accounts and distributed to underlying continuing property records. The cost assigned to units of purchased property and their average unit cost would not, except by coincidence, be comparable with the cost of constructed property of any year. If units purchased are all in-

cluded with construction of the year of acquisition and an age distribution ignored, constructed property would be stated at cost new and purchased property at reproduction cost new less depreciation. If units of purchased property are distributed by year of installation, the reproduction cost new less depreciation at date of acquisition would be far different, except by coincidence, than the original cost new of the constructed units at their respective dates of installation. In either event, the difference might be so substantial as to affect average unit costs materially and require separate subdivisions of accounts for constructed and purchased properties.

Further, if acquired properties are recorded at reproduction cost new with accrued depreciation at acquisition entered in the depreciation reserve account, the problem would still exist. In that event, units installed many years prior would be entered in the records at reproduction cost new of the year of acquisition and hence would not be carried on a basis at all comparable with that of units constructed by the utility in prior years.

When continuing property records are established on an original cost basis, they have continuing value regardless of change in ownership of the properties. In accordance with original cost procedures, the new owner may simply carry forward the data shown by the plant record of the seller and maintain it as his own without having to establish the record anew on some entirely different cost basis. It seems to me that it would be wasteful and highly impracticable to fail to make use of this opportunity for savings and convenience.

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Original Cost Aids in Depreciation Analyses

THE use of original cost for the detailed plant accounts results in all plant being stated on a cost new basis.⁵ Hence, the depreciation rate applicable to a specific class of plant can be based on an estimate of total service life. There is no necessity to depreciate part of the account (constructed plant) on a total service-life basis and another part (acquired properties) on a remainder-life basis.

There are instances where utilities have maintained separate records for acquired properties and constructed properties due solely to depreciation requirements. For example, a Wisconsin utility recorded its original investment at cost, which was substantially reproduction cost new less depreciation. This original investment was depreciated over its estimated *remaining* life. The construction additions and replacements were depreciated over their estimated *total* life. In order to preserve data necessary for this procedure, each retirement had to be identified as to whether it was from purchased or constructed property, each plant account had to be subdivided to maintain this information, and the composite rate of depreciation for each plant account and

for the total plant changed from year to year. Upon the change to original cost accounting, depreciation rates are all stated on the basis of total service life and the prior subdivision of plant accounts is no longer necessary.

To be sure, the acquisition adjustment account arising on property purchases, to the extent comprising a part of the cost of depreciable property, requires amortization over the remaining life of property to which applicable. It is much easier, however, to deal with amortization of this single account on a remainder-life basis than it is to have different rates of depreciation applicable to different portions of each plant account.

The continuity of records on an original cost basis is a distinct aid in depreciation estimates. Generally speaking, the greater the amount of past experience uniformly recorded in accounts, the greater the worth of statistical analyses. When original cost is established, the record of prior plant additions and retirements is carried forward and maintained thereafter regardless of changes in ownership. This permits turnover studies and other statistical analysis to be made covering longer periods and eliminates the necessity of discontinuing such analyses at dates of acquisition of acquired properties because prior data are not comparable.

⁵ There are minor exceptions for completed plant bought from nonutilities, such as an office building.



“THE continuity of records on an original cost basis is a distinct aid in depreciation estimates. Generally speaking, the greater the amount of past experience uniformly recorded in accounts, the greater the worth of statistical analyses. When original cost is established, the record of prior plant additions and retirements is carried forward and maintained thereafter regardless of changes in ownership.”

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Permits More Stable Statistics

REGARDLESS of change in ownership of utility plant, its original cost is constant and unchanging. This is of considerable value in any instance where data are expressed as a per cent of the detailed plant accounts. To illustrate this point, let us assume utility A has \$200,000 of utility plant in service at original cost on which it accrues annual depreciation of \$6,667 based on a 30-year service life or an annual rate of $3\frac{1}{3}$ per cent. Utility B has an identical plant composed of \$100,000 of utility plant in service at original cost and \$80,000 of property acquired which was recorded at reproduction cost new less accrued depreciation of $33\frac{1}{3}$ per cent.

This makes a total of \$180,000 of utility plant in service for utility B, on which annual depreciation would be \$7,333, or 4.07 per cent. On the surface, the statistical result would indicate that utility B is accruing depreciation more rapidly, yet the actual rate of depreciation is the same in the case of each.

OF course, the original cost of plant of one utility may not be at the same price level as that of another utility, and comparative statistical ratios are affected thereby. But the use of original cost for all utilities gives greater stability to statistical data related to plant than if utility plant in service were stated as a hodgepodge of original cost for constructed properties with acquired properties being stated at estimated reproduction cost new at acquisition, or estimated reproduction cost new less depreciation, or some prorated figure derived from such estimates.

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Better Adapted to Use of Index Numbers

WHEN plant is stated at original cost, it can be converted to reproduction cost new by use of index numbers with less effort than if plant is stated at a mixed aggregate of varying types or estimates of cost. This is readily apparent because original cost is constant, conforms closely to original cost of construction, and most index numbers are related to construction costs of prior years. If plant costs were stated on various bases—original cost for constructed properties, estimated reproduction cost new at acquisition with or without deduction of depreciation for acquired properties—derivation of index numbers would be complicated and require substantial time and effort to obtain a proper multiplier.

It should not be inferred that reproduction cost new estimates can be made readily by use of index numbers or that the result so obtained would be as reliable as a priced inventory. But the inventory procedure is time-consuming and costly and frequently approximations of reproduction cost are needed promptly. Such approximations can be made more accurately with less work if all plant is stated at original cost.

Facilitates Allocation of Property Taxes to Districts

IN Wisconsin, electric utilities are subject to taxation by the state on the full market value of their property within the state. The assessed value is found for the utility as a whole, without determination of value for each taxing district. The total tax assessed is allocated 15 per cent to the state, 20 per cent to the counties, and 65 per



Use of Index Numbers

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cent to the towns, cities, and villages within or through which the business of the utility is conducted. The statutes provide that the taxes shall be apportioned, as nearly as may be, on the basis of property located and business transacted within each town, city, and village. In conformity with this requirement, the tax apportionment is made, based on the composite percentage which the property and revenue in each tax district bear to the total property and revenue of the utility.

Original cost of property serves a useful purpose in this apportionment. It is constant and, even though changes in ownership of property occur, the property base for a taxing district remains unchanged. Of course, a change in ownership of the property in a taxing district from one utility to another will result in that taxing district getting a part of an entirely different tax, which may be more or less than formerly. But if, in addition to this probable change, there were added the effect of a change of the property base used for tax allocation purposes, which might

be substantial dependent on the price paid for the property, the tax revenue of a district might be materially and unfairly affected.

Thus, original cost is useful in bringing about greater stability in the allocation of taxes to taxing districts. It seems clear too that if one utility has its property classified by taxing districts on an original cost basis, it would be quite desirable if a utility purchasing the property should carry over and utilize such record. That end is attained with original cost classification of plant.

More Nearly Approximates Base for Income Tax Depreciation

THE property base upon which depreciation is allowable for income tax purposes frequently differs from cost of the property because of prior acquisition of going concerns on a tax-free basis. However, it is to be noted that, in general, original cost more closely approximates the base for income tax depreciation than does the total cost to the utility of its plant.

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The Wisconsin department of taxation is quite generally accepting original cost reclassifications of utilities as a proper base for depreciation allowable for state income tax purposes. This eliminates any necessity for keeping a separate set of plant records for state income tax purposes.

There are instances also where original cost has been accepted by the Internal Revenue Bureau for future use upon reaching some compromise agreement covering the difference between original cost and the previously established property base for Federal income tax purposes. It seems to me that negotiations along these lines could be undertaken with the Internal Revenue Bureau in a substantial number of cases. It is probable that the depreciable property base for Federal income tax purposes is generally at least equal to the original cost. Agreements regarding the treatment of any difference for Federal income tax purposes might result in full acceptance of original cost for tax depreciation purposes and result in considerable reduction in the separate records so often necessary for tax purposes.

Aid in Rate Base Determination

IN 1898 when the United States Supreme Court enunciated the fair value rule in *Smyth v. Ames* it listed a number of factors to be considered in ascertaining fair value, including the original cost of construction, the amount expended in permanent improvements, and the present cost of construction. The weight to be given to these, and other factors bearing on value, was such "as may be just and right in each case."

In the decades following that deci-

sion, the three major factors generally considered bearing on rate base value have been original cost of construction, the cost or investment of the present owner, and reproduction cost new, with proper recognition of depreciation in each instance. The weight given to these factors has differed among commissions and courts and has varied with the passage of time. But it seems safe to say that original cost of construction and the cost to the present owner have always been important factors in determining rate base value.

Even if reproduction cost new less accrued depreciation were the sole measure of rate base value, original cost would be an aid in the determination of that value, because it affords a check on the propriety of assumptions used in estimating reproduction cost new and reasonableness of the final result. With a good record of original cost tied in with continuing property records, the labor performance assumed in an appraisal can be checked with actualities. Stores expenses, tool expenses, and other costs usually considered as material and labor loadings can be compared with actual experience by years. Overhead costs can be checked to determine whether they are hypothetical or conform with the practices of the utility. The appraisal can be checked readily to ascertain whether it is an estimate of reproduction cost in kind under conditions actually encountered in the construction of the plant or whether it is a hypothetical wholesale reproduction either in kind or of the best available substitute plant. In other words, good records make for better appraisals. And if original cost

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is recorded in the accounts, together with details of units of property and the years of construction, the best possible type of record is available for use not only in estimating reproduction cost new but in checking the results of such estimates and giving assurance that there has not been a marked departure from actualities.

SINCE both cost to the utility and original cost are of importance in the regulatory process, and since each can be ascertained and maintained perpetually by accounting procedures, common sense indicates the wisdom of doing so. That is what is done by the original cost requirements of the system of accounts. The cost to the utility—the investment the owner has made—is required to be recorded in the accounts and likewise the original cost of the property to the person first devoting it to public service. This is practically synonymous with original cost of construction, although there is a slight difference relating to items of completed property acquired from non-utilities for which cost to the utility is taken as original cost. However, for practical purposes, original cost as used in the system of accounts meets the requirements for original cost of construction.

As an indication of the facility with

which both cost to utility and the original cost of plant are readily available for regulatory purposes, the following data are taken from the balance sheet of a Wisconsin utility:

Original cost of utility plant in service	\$50,318,870
Less reserve for depreciation ..	9,190,498
Depreciated original cost of utility plant in service	\$41,128,372
Add utility plant acquisition adjustments	2,213,153
Depreciated cost of utility plant in service	\$43,341,525

Thus, with just a few minutes' examination of the balance sheet of the utility, its plant is stated (a) at depreciated original cost and (b) at depreciated cost to the utility. Reproduction cost new less depreciation cannot be determined so quickly. But if a case developed in which it was involved, then all three factors—original cost, cost to utility, and reproduction cost—would be presented to the commission for its consideration. It is not a function of accounting to state the weight that should be given to any one of these factors in a determination of value for rate base or any other purpose.

But it is a function of accounting to show the facts as to original cost of plant and cost to the present owner. To show only one and not the other



Q "SINCE original cost of plant and cost to the present owner are factors in the rate-making process, they are important to investors, and financial statements which show these facts are more informative than those which show only cost to the utility. This is particularly true in those instances where cost to the utility is considerably in excess of original cost. In such a case the weight given original cost in a rate proceeding might be of material significance to an investor in the utility."

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Utility plant:		
Utility plant at original cost	\$55,082,528.72	
Excess cost of tangible property acquired as entireties, over original cost thereof, in process of amortization	192,465.47	\$55,274,994.19
Intangible plant at cost, in process of amortization		2,146,871.62
Excess of cost of investment in subsidiary company over underlying book value at date of acquisition		796,744.08
Total		\$58,218,609.89



would be to fail to use the tools of accountancy to the best advantage.

Original Cost Gives More Information to Investors

SINCE original cost of plant and cost to the present owner are factors in the rate-making process, they are important to investors, and financial statements which show these facts are more informative than those which show only cost to the utility. This is particularly true in those instances where cost to the utility is considerably in excess of original cost. In such a case the weight given original cost in a rate proceeding might be of material significance to an investor in the utility.

A showing in the balance sheet of excess of cost to the utility over original cost of plant practically assures that stock watering or serious imprudence in purchases of going concerns will be revealed. Original cost is not synonymous with value and purchases of going concerns for amounts in excess of original cost may be entirely proper. But there is a limit on the amount of excess which can be prudently paid. The limit cannot be defined for general application except to point out that if it becomes too much, the question of prudence arises.

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It is of interest to compare the statement of the cost of plant contained in the annual report to stockholders of a utility whose property is now on an original cost basis with a similar statement in the annual report of a few years ago before original cost was established. In its audited balance sheet as of December 31, 1943, Wisconsin Public Service Corporation reports consolidated utility plant as outlined above.

No notes to the balance sheet or statements in the auditor's certificate are made regarding plant. The facts are stated right in the balance sheet.

In the annual report to stockholders of the same corporation for the year 1933, before original cost reclassification was required, consolidated utility plant was shown in the audited balance sheet as of December 31, 1933, as follows:

Plant, property, rights, franchises, etc.	\$48,909,275.57
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No explanation is given of the basis on which the plant is stated, either by way of a note to the balance sheet or in the auditor's certificate.

It may be considered that comparison of the balance sheet showing original cost should be made not with those of previous years, when account-

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ing standards were different, but with what the balance sheet of the corporation would show concurrently with respect to plant if original cost were ignored and classification of plant based on a division between tangible and intangible plant. That information is also available when accounts are kept in accordance with original cost classification procedures and is herewith shown as of December 31, 1943:

Utility plant:	
Tangible plant	\$55,150,809.75
Intangible plant	2,271,056.06
Excess of cost of investment in subsidiary company over underlying book value at date of acquisition	796,744.08
Total	\$58,218,609.89

While such a classification is a great improvement over that shown in the corporation's 1933 report, it does not yield the added information available in the 1943 report of showing both cost to the company and original cost.

The second and concluding part of this article will be published in the March 29, 1945, issue of the FORTNIGHTLY.



“**I**N all this struggle over wartime price regulation every interest group has been guilty, in its determination to serve itself, of disregarding the welfare of the people as a whole. Each group has refused to see that if an evil price inflation is to be prevented ALL prices must be brought under restraint. That restraint must have flexibility enough to allow for the relief of real and disproportionate hardships (impossible in any case to measure by precise formula) but it is the price structure as a whole that is at stake. It would be absurd to suppose that the price structure as a whole could be ‘stabilized,’ that is, held to any fairly stable level, while any major component was free to rise and rising.

“If the word stabilization in this use has any meaning it means the restraint of all individual prices, including wages, for the purpose of holding down the price structure in its entirety against the upward pressure of government expenditure of many billions on the war. Some government agencies have lately attempted to distinguish between inflationary and non-inflationary advances in prices or wages. No such broad distinction can be made. Every price or wage advance evokes demand and even necessity for others.”

—EDITORIAL STATEMENT,
The Wall Street Journal.



“Co-ops” under a Microscope

Distinction between the true and the spurious kind of “coöperation” pointed out by the author who also discusses the bearing of these tax-subsidized industrial groups on the general welfare of the people, and emphasizes the lack of knowledge of the average taxpayer as to the significance of the political discrimination in favor of coöperatives against other forms of business.

By LARSTON D. FARRAR

THE average American, missing the big bite out of his semi-monthly pay envelope, is in a more receptive listening frame of mind when taxes are discussed either in beer halls or at banquet tables these days. Both presidential candidates took cognizance of this new phenomenon in recent preëlection speeches, but, even if they hadn't, everybody would still know that John Q. Public is thinking of his tax money more than ever.

President Roosevelt, who now has another four years' lease on the White House, indicated in several speeches and by several overt preëlection moves that he understood many “common men” were thinking of government expenditures. At one point, he even went so far as to write Harold D. Smith, director of the Bureau of the Budget, to make plans for retrenchment in the Federal payroll. This was so revolutionary that several thousand bureaucrats got the jitters and at least 100 resigned and found jobs in private industry, according to Washing-

ton newspapermen, who should know.

At any rate, the fact that presidential candidates have learned that the average man is interested, if only to a certain degree, in where his tax money goes, bodes well for those who want to show this average man that the tax money in many cases is going into projects and enterprises that are helping to kill the very system that gives him and millions of others work at good wages.

There is evidence, also, that Congress is considering taxing co-ops along with other businesses. Senator Walter F. George (Democrat) of Georgia, recently intimated he is particularly interested in determining whether co-ops and other tax-exempt organizations are making “extra and competitive profits” on benefits derived from operation of “grain elevators and other public utilities.” The implication is that if such co-op profits compare with private company operation of similar enterprise, Senator George (and other members of Congress) may be

"CO-OPS" UNDER A MICROSCOPE

disposed to consider raising revenue by taxing such agencies. Senator George's indication came after Colin F. Stam, tax expert of the Joint Committee on Internal Revenue Taxation, reported that his group was studying the returns of some 60,000 co-ops, labor unions, and others required to file such information under the new § 101 of the Internal Revenue Act of 1944. Mr. Stam said he hoped to have his report ready in time for study by the 79th Congress.

SUCH groups as the National Tax Equality Association, which has been conducting a campaign for many months to have the dividends of coöperatives taxed along with profits of private business, could well take hope from these evidences that the average man and his Congressman are thinking of the tax dollar once more. Of course, much depends upon the inclination of the new Congress, which is Democratic, of course, but whether it will develop more into New Deal-Democratic or just plain Democratic is not known for sure as yet.

In the inevitable stock-taking following the national elections, many persons in the business field were rather chagrined because the Republican candidate did not talk more about the manner in which tax money is being wasted, is being used for special privilege, or is being used to subsidize projects which are hurtful to legitimate business. However, it is not the business of a presidential aspirant to educate the people. It is his business—in fact, his only choice—to make a campaign on the basis of what people already know. And, by and large, it must be admitted sadly, the people

really know very little about what is happening all over this big country.

"Never underestimate the people's intelligence; never overestimate their knowledge." This sentence is tested and is known to be sound by every politician who holds office for long. The people may not be "too damned dumb to understand," as Harry Hopkins is reputed to have once said, but certainly many are too uninformed to make intelligent decisions on many questions.

IN no instance is this fact clearer than when discussion turns to the field of coöperatives. Although students in college get an unusual amount of instruction concerning coöperatives, their history and their benefits, actually few Americans today know what a coöperative is, or what it is supposed to be. That is why thousands of shrewd operators have been able to set up "coöperatives" which are in no sense coöperative businesses. And that is why millions of Americans vaguely say they are in favor of "coöperatives" and vote for candidates who favor "coöperatives," although these millions have no idea of what they are voting for, generally speaking.

Not long ago, I was talking with the owner of the only modern hotel in a little city in Tennessee. He was ardently in favor of forming a coöperative, which would be financed with Federal funds, to buy and operate the existing electric utility serving the city and adjoining areas.

"Why don't you like the present power company?" I asked. "What's wrong with it?"

He admitted that the service was good. He admitted that he liked the officials personally and that they gave

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him much good trade. He admitted that by and large the repair service and other facilities were excellent. It turned out that he just didn't like to pay a big power bill each month and figured that he would get a much cheaper rate under a coöperative.

"That may well be," I pointed out. "But then I don't like to pay \$7 a day to you for a room. If this hotel were owned by a coöperative and if Federal money were being used to pay for supervision, for the interest charges over a certain amount, and for other big expenses, undoubtedly the room rent would be cheaper."

The situation, he said, was not analogous. But it was, I pointed out, since he had a monopoly on good hotel rooms in that town just as the electric company had a virtual monopoly in furnishing power and light. Of course, he wouldn't like it at all if I went around trying to get the government to take over privately owned and operated hotels, but no doubt he is still busy trying to think up ways and means to get the government, in effect, to take over the private power company.

LIKEWISE, I talked with a small-town druggist who seemed to be sold on the Rural Electrification Administration. It was, he said, a wonderful thing. I admitted that no doubt it was

a wonderful thing, but I wondered aloud if he wanted to pay to give every farmer in the county a large barn. No, he wouldn't pay for any such thing.

Well, why not? You're helping to pay, through your tax bill, to give them cheaper electric rates than you get. If the REA co-ops had to pay taxes—taxes comparable to those paid by the power company here in the town, the farmers would still be able to have electricity, but they wouldn't be mooching off city cousins who do pay taxes through rates charged by private utilities.

He couldn't understand, so I put it another way. Suppose, I said, that the government came into town and opened a drugstore on the opposite side of the street from him.

"I wouldn't mind," he chimed in.

"Maybe not," I said. "But consider this: What if the government-operated store paid no city, no county, no state licenses? It had to pay no income taxes. The same toilet goods you sell over the counter with the 20 per cent Federal tax, for example, it could sell without the tax, perhaps. Could it operate more cheaply than you? Could it run you out of business? Would such a thing be fair, as long as the people of this town were getting good drug service?"

"Never thought of it like that," he said.



Q "A COÖPERATIVE in the traditional meaning of the word is a voluntary union of persons, banded together on a democratic basis, to supply members with goods or service, or both, or to employ its members in producing for sale, or to sell its members produce, or to finance its members, or to combine all these aims in one, and at the same time to distribute surpluses in a manner agreed upon by the members as fair to each one."

"CO-OPS" UNDER A MICROSCOPE

THE fact is that most Americans, busy with making a living, have not considered any number of angles to our modern economic life nor have they learned of the inevitable effects of the trends that are taking place in America today. If they but knew all the angles, they could arrive at much more logical decisions. Herein lies the answer to the problems of the industries that are fighting the unfair preferences given competitive "coöperatives."

Like many another word in our modern lexicon, the word "coöperative" has come to mean many things to many people. A coöperative in the traditional meaning of the word is a voluntary union of persons, banded together on a democratic basis, to supply members with goods or service, or both, or to employ its members in producing for sale, or to sell its members produce, or to finance its members, or to combine all these aims in one, and at the same time to distribute surpluses in a manner agreed upon by the members as fair to each one.

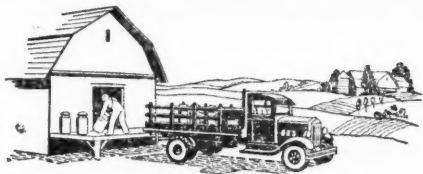
By its nature a true coöperative does not need, and is neither morally nor legally entitled to, preferential treatment from the government in the form of exemption from taxes or from regulation or from any other lawful burden which comparable private business-for-profit must bear. In Sweden and other Scandinavian countries coöperatives have demonstrated that they can successfully operate for the benefit of their members and carry the full share of taxes and other burdens which comparable private business must bear. They are, accordingly, highly respected by the public and the private business

in such countries. They are entitled to respect because they have earned it.

IN truth, the only real distinction between a true "coöperative" and private business is that the latter operates openly for the profit of its owners as distinguished from its customers; whereas, the former distributes, or redistributes, its benefits (including profits, if any) to its associate members who are, in a sense, its customers. Viewed in this light, any association which depends for its existence on support from, or sacrifice at the expense of, nonmembers (whether through tax exemption or other preferential treatment) is no true coöperative at all. It is nothing more or less than a partially subsidized group organized for the purpose of obtaining such benefits because they cannot be obtained through a different form of organization. A less polite definition would be to call such a group a sponging parasite. Any group which must have the support of subsidy from the outside—a subsidy for which it makes no compensation or social justification — lends weakness rather than strength to the body politic and the national economy.

Actually, there are very few coöperatives operating on the orthodox idealistic basis today, and generally they are so small as to be negligible in our society. There are 13,000 organizations which call themselves "coöperatives" in the U.S. today, with some 5,000,000 members, with four-fifths of them being in farm districts.

THERE are today about 50 federations of coöperatives, more than 100 centralized regional associations of coöperatives, and more than 100



Business of Coöperatives

“THE coöperative distribution of milk and other dairy products amounts to about \$1,000,000,000 a year now; coöperative associations sell \$700,000,000 worth of dry beans, rice, and grain annually; purchasing coöperatives, which do everything from buying feed, seed, and fertilizers to operating big retail stores, now do an annual business of some \$1,200,000,000.”

coöperative sales and purchasing agencies operating in principal cities and markets.

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In coöperative production, eight major groups own nearly 600 oil wells, 9 refineries, and at least 1,200 miles of pipe lines. The coöperative business in oil alone amounts to \$200,000,000 a year.

With the tax burdens looming larger and larger as a factor in business, all taxpayers, especially business, should be interested in coöperatives. Coöperative operations are of concern to great industries, the oil industry, the grain trade, and retail trades, as well as to private power companies.

These business groups feel that competition by these coöperatives, based as it is on special privilege from local, state, and national governments, is grossly unfair to private business and harmful to our whole economy.

FOR decades, particularly during the past ten years, the Federal government has helped coöperatives in a generous fashion, not only by granting them tax exemptions which now come to considerable money in private operations, but by giving them lenient treatment under the antitrust laws and by providing credit through the thirteen banks for coöperatives. In some cases, notably that of REA, the government itself has gone into the business of helping originate coöperatives.

As analyzed above, most modern so-called coöperatives are not true coöperatives in the historical sense of the word. This fact should be made clear to the general public. But, for practical reasons, we can scarcely expect the REA or the Department of Agricul-

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ture or any other government agency to make this clear, however. It is up to the private companies and private taxpayers to show up this unfair and uneconomic subterfuge for dividing the wealth, diluting the vitality of tax-paying private enterprise, and generally making over the basic pattern of American life.

Can co-ops ever become a useful productive part of our American system? Such a question may seem impertinent to present beneficiaries of co-op membership who are receiving services which they otherwise would not enjoy. To such beneficiaries, there is no doubt about the co-op being useful or productive. But the question is still a fair one when it is asked on behalf of *all* the people, for *all* of the time.

Granted, in other words, it is necessary to make some concessions to co-ops to get them started in socially desirable fields not profitable enough to attract private enterprise (just as it was necessary to donate lands for right of way to get the railroads started) does it follow that co-ops should go on indefinitely enjoying these advantages even after they begin to pay out and return money profits to their member owners?

ANSWERING the original question, it is possible for co-ops to become useful, productive parts of an American system — considered from the standpoint of *all* of the people, *all* of the time. It becomes possible the moment the co-op takes up the same social responsibilities other citizens and business enterprises must bear — paying taxes, submitting to appropriate regulation, and so forth.

If, as, and when American co-ops

attain this status of social responsibility, they will be entitled to respect as useful members of our society, earning their own way and sharing the common burdens of all. There is no need for co-ops to forego their primary object of substituting community benefit for profit motive to attain this status. Private business, such as the electric companies, can cooperate with and live side by side with such a system of true cooperatives. But private business can hardly be expected to get along with the sponging varieties of pseudo co-ops which turn unjustified advantages of government preference into unfair competition against the very tax-paying system of private enterprise which is helping to support them.

Any other solution to this problem of policing our cooperative movement — a problem which grows more serious daily — will eventually flirt with economic chaos. Here's why: All subsidy invites log-rolling and pork-barrel policy. As long as one section of the country is getting a preference, other sections, which may have been against the whole thing in principle, will want their share. The astute Mr. Dooley once repeated an imaginary debate on a tariff bill by a Virginia Senator as follows:

I hev alway bin agin' th' fallacious principle av prothective tariff. I wuz taught by me father before me that it wuz an invition av th' devil, himself. But, Misther President, if ivery other selfish state av this misguided and benighted union are going to steal a ride on this gravy thrain, then, as the Senator from the great commonwealth av Virginia, I shall insist an' demand that we git our share av it.

LIKEWISE, it is not difficult to foresee that if we drift steadily into a policy of subsidizing one class through preferences to co-ops, other

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classes of taxpayers will want their share of the same treatment. The city taxpayer will have to "get something" in return for benefits which are handed out to the farmer. With each successive subsidy, the strain on productive tax-paying enterprise is increased. The end of this road is economic stalemate. For when everybody is subsidized, nobody can possibly profit except the dispenser of subsidy—in this case the politician.

It is rather difficult to understand how the American people can go along year after year subsidizing huge groups of their fellow-Americans who are as well or better off than they are.

Then there is the problem of limiting the scope of these spurious co-ops. Just recently, the Indiana Farm Bureau Coöperative Association, Inc., applied for a Texas charter and in its formal application limited the proposed activities of the co-op to farm harvesting, marketing, etc. But a letter of transmittal sent with the application indicated that the co-op also contemplated extending its oil explorations. The Texas attorney general ruled that farm coöperatives cannot engage in the oil business in Texas. It is not at all unusual to hear of a coöperative set up for one purpose trying to do something else.

This was widely regarded as a set-

back to coöperatives that wanted to go into all lines of business, but there was recently a most significant victory for coöperatives. In Washington the first week in November, the tax court of the United States upheld the right of coöperative corporations (and of private business corporations as well) to deduct from gross income before payment of taxes sums returned to patrons, when the bylaws of the co-op require money saved—better known as savings dividends—to be returned to customers.

IN its basic principle such a ruling is not new, since the tax-exempt nature of savings dividends has been well established. But the decision in this case is important because the principle of such exemption has been under fire. It is superfluous here to point out that savings dividends represent real net income and should be taxed just as any other profits. The point is that the government is still being partial to one group—coöperative enterprises—over another group of our society, *i.e.*, privately owned and operated enterprises. Since this nation was built on private enterprise, it seems strange that its populace would sit by and either condone or not object to its making possible the wrecking of that same enter-



Q "... German industry was coming under the control of the state long before World War I. By 1930, three years before Hitler took over, the German Republic owned 53 per cent of all industry in the nation. Hitler, of course, sandwiched himself neatly in between the bureaucracy and the people, both of which proved helpless when he consolidated his power. No one can point to a certain date and say that it was on that date that the German people lost their liberty; they lost it a little at a time."

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prise which made it great. The only answer is that the people do not know, for it is certain that if they knew their taxes were higher because certain businesses calling themselves co-ops wanted to make hay they would vote against such a thing.

Those who point to the slow growth of the coöperative movement in America and to the amazing growth of private business, as did Herbert Corey in a recent issue of the PUBLIC UTILITIES FORTNIGHTLY, have history on their side in predicting that REA co-ops and other similar co-ops might eventually turn into private enterprises. However, not all history is on their side. The recent history of Germany and Italy proves more or less conclusively that complete government control over either one industry or all industry does not come at one time. It comes slowly; a little bit of private industry is pinched away here, another little bit is pinched away there. The people one day wake up and find all business under state control, but they can never point to a certain date on which it happened.

ACTUALLY, as is well known to most historians, German industry was coming under the control of the state long before World War I. By 1930, three years before Hitler took over, the German Republic owned 53 per cent of all industry in the nation.

Hitler, of course, sandwiched himself neatly in between the bureaucracy and the people, both of which proved helpless when he consolidated his power. No one can point to a certain date and say that it was on that date that the German people lost their liberty; they lost it a little at a time.

It could be the same in America. If we ever lose our whole freedom, it will not be at one fell swoop. All private industry will not be taken over at once. But collectivists working in the government take it over a little at a time. That is why it is deceptive to compare what the coöperatives are doing in the way of business, with what private enterprise is doing. Sometimes it even seems that many collectivists actually encourage monopoly in industry so that they will have a good excuse to point to occasional misdeeds by these monopolists, and thus take over in the name of the people.

To point out the obvious unfairness of this to businessmen is like carrying coals to Newcastle. It is done here only to emphasize that the average man must be let in on what unfortunately appears to be a secret. When he learns that he, the average man, is contributing to these benefits for citizens who are in a better position to pay their own way than he is, then we can reasonably expect some "political action" of a kind not presently in operation.

Private Enterprise Plus!

Up in a western New York state little town, Albert Shelby's house was cold because of fuel oil shortage, so Albert drilled a well in his yard for natural gas.

"Looks as though I'd be in the utility business," he says. "Instead of a couple of thousand feet a day as I'd expected, we have enough for all the neighbors."

Thus, the venture spirit still carries on in this country.



Radio for Transit Companies

A 2-way system operating in Philadelphia as a war-time measure may, in the opinion of the author, become an advance step for peacetime travel.

By DREW J. DAVID

JUST as the Philadelphia Department of Public Safety's bureau of police has its own radio system, so has the Philadelphia Transportation Company. For Philadelphia is a big city—a mere 129.7 square miles of it, with no parts unserved.

Only recently has the Federal Communications Commission granted the PTC a radio channel for dispatching during emergency. Thus 2-way radio, which is proving itself so important to our armed forces, is also helping the war on the home front—helping to speed transportation of war workers throughout the metropolitan area and all surrounding districts. Time lost is a battle lost, and the company knows it. With the coming of peace, the radio system will continue, for Philadelphia will still be a big city.

At one of its mid-city barns, the PTC has built a Frequency Modulation station and installed in its emergency trucks and supervisors' cars all necessary equipment for 2-way radio communication. The main idea behind it

all is to quicken contact between street supervisors and operations headquarters of the company.

Riders of streetcars know what can happen, and are familiar with a few of the many snarls which so often occur. They know how seriously they may develop in the more thickly congested areas; and that if not smoothed over quickly, how the delay of but one car can paralyze traffic. It is the job of the street supervisor to manage this trouble by calling the repair crews, rescheduling, and short runs of cars and busses.

A FIRE of major importance, let us say, disrupts traffic of a surface route along a major street. Supervisors formerly had only telephone and 1-way radios for communication between an emergency dispatcher and himself, the street supervisor of a certain area. Now, this speedless method is passé. The area supervisor proceeds to the location immediately, having been notified by the emergency dispatcher via 2-way radio.

RADIO FOR TRANSIT COMPANIES

To quote the *PTC Traveler*, as printed in the issue of December 22, 1944:

"Now the dispatcher can make instant contact with the supervisor and the latter is able to report back immediately to the dispatcher on reaching the trouble-spot, if rerouting of vehicles in areas is necessary or further difficulties arise. By means of 2-way radio, the dispatcher can also contact supervisors in adjoining sections. This is often required because in rerouting, not only that line is affected, but also the schedules of cars on intersecting or adjoining routes. In the case of a disabled automobile or truck on the track, the dispatcher or supervisor can, with the new installation, request an emergency truck to proceed to the location."

OLE Man Winter is another hazard. He will bow before the 2-way radio. The first to notice possible delay due to snow drifts is again the supervisor who quickly contacts the dispatcher who then sends a snow-fighting crew into action *now*.

"The dispatcher can both receive and send messages to any of the radio-equipped vehicles, or he can talk to all simultaneously."

Signals of sufficient strength to be picked up anywhere in the city's area can be sent by the PTC's new, permanent 400-watt station. A coverage of 5 miles is assured by the portable transmitters in the automobiles and trucks.

Throughout the nation, radio companies have made Frequency Modulation familiar to the public. Such receivers are so called because of the modulation of the transmitted signal rather than the strength. When radio companies again manufacture radios instead of war materials they will produce only FM receivers. Some such sets are in service even today.

Electrical and other interferences are minimized by FM and also the discrimination of noise. Many police departments and modern military communications use FM radios. Just as noise is discriminated in the battle field, so will it be in the hustle and bustle of downtown business areas.

This is surely a step forward for the streetcar riders and strap-hangers of the nation. In the future there will be less delays due to fires, accidents, breakdowns, and other tie-ups to which track-riding vehicles may be subjected.

Philadelphia is perhaps the first in this new field.

Oaken Bucket to Go

THAT old oaken bucket of poetic repute, but insanitary and inconvenient in reality, is doomed to banishment from Britain's village wells.

To be sure that practically every group of houses in country districts gets a piped water supply, the government plans to spend £15,000,000 in England and Wales and £6,375,000 in Scotland. The program, which also includes the improvement of sewerage conditions, will be completed in between five and ten years after the end of the war in Europe.

It is estimated that the cost of a piped supply of water to the householder of an average small house for all use for a week is seldom more than the cost of a single glass of beer.



Wire and Wireless Communication

SENATOR McFarland, Democrat of Arizona, took the Senate floor on Washington's birthday to outline the forthcoming program of the Senate Interstate Commerce Committee in studying the proposed merger of American international communication interests. Senator McFarland, who had been named by Chairman Wheeler of the Senate Commerce Committee to handle the important merger study, promised early action on various plans for bringing about satisfactory merger legislation. The views of various government departments, the Army, the Navy, the Federal Communications Commission, and the State Department, will be obtained in a series of hearings likely to commence early in March. Even the views of the White House may be made known to the subcommittee through a special message voiced by a presidential aide.

The Arizona Senator, in discussing the international communication policy of the United States, in his address to the Senate on February 22nd, stressed the unanimity of opinion that "something must be done" to improve the American international communication setup. He observed that the government departments, including the military, had been giving increased attention to the proposition that eventually there will have to be a "single integrated American communications company engaged in overseas or international traffic."

One responsibility of the Senate subcommittee referred to by McFarland is the job of assessing the "ultimate use"

of the vast amount of communications equipment and facilities now being used by the Army and Navy and which will have to be paid for by the American taxpayer. He hinted that some of our Allies might not be very willing to hand back to us such equipment now being used in their territorial areas, even though we may need it for expanding military operations.

PREVIOUS to Senator McFarland's address two other members of the upper chamber had discussed the vast network of communications facilities installed by the American armed forces throughout the world. They were Senator Burton, Republican of Ohio, and Senator Tunnell, Democrat of Delaware, members of a subcommittee of the Senate War Investigating Committee, who recently inspected military installations in the Mediterranean area. Senator Burton pointed out that the Office of War Information operates a radio station in Algiers which cost over a million and a quarter dollars and that the French government has already shown its desire to get control of this station—preferably through Lend-Lease. Burton said that such communication facilities not only in French North Africa but in the Middle East might be a valuable experimental test for a more vigorous United States communications policy in the postwar period.

Senator Tunnell likewise believed that the Algerian station presented an opportunity to this nation to use it as a valuable radio terminal. It would free Ameri-

WIRE AND WIRELESS COMMUNICATION

can users of international communications from the present and prewar monopolistic setup of international wireless and cable facilities.

Senator McFarland expressed some concern and added his thought that the Army and Navy were also concerned over the possibility of the American military communications system being turned over to a "third-rate" American international communications organization—its strength dissipated among competitive commercial companies. He pointed out that since Pearl Harbor the Army and Navy have labored mightily to bring into existence "an empire made up in part of the facilities of our commercial companies, and in greater part by an entirely new system—the biggest communications system in the world—but run by the Army and Navy."

* * * *

PAUL A. PORTER, chairman of the Federal Communications Commission, informed War Mobilization Director James F. Byrnes recently that the shutdown of the race tracks on January 3rd had made available for essential use 19,000 miles of leased wire circuits, with 700 extensions, previously used for dissemination of racing information.

Mr. Porter, who is also chairman of the Board of War Communications, said that large numbers of telephone sets were being reclaimed that will assist in alleviating the shortage of instruments. He pointed out that the telephone industry has one and one-half million orders for service awaiting fulfillment because of shortage of either telephone instruments or central exchange equipment.

The manpower involved in the maintenance and use of the leased wires has also been made available for essential work, Mr. Porter reported. He said that at the same time Western Union was taking out the racing information networks, the telephone industry was taking steps to recover the "large number" of telephones used locally to handle racing information and bookmaking. He said this would alleviate in the near future the backlog of 1,500,000 telephone orders.

THE Federal Communications Commission on February 20th ordered an investigation into the "apparent need for interstate and foreign telephone long-distance service" in the area of Marysville, Missouri. The proceeding will determine whether a physical connection should be ordered between the facilities of the Bell system (Southwestern Bell Telephone Company) and the Peoples Telephone Exchange, Inc., or the Hanamo Telephone Company. It is understood that the Peoples Telephone Exchange was formerly a mutual company, which was incorporated as a commercial company in 1941 and sought a certificate from the Missouri Public Service Commission to operate, which request was denied.

The Hanamo Telephone Company is a commercial company interested in preventing the Peoples Telephone Exchange from obtaining the operating certificate. The certificate case is now before the Missouri state courts. Southwestern Bell has indicated its willingness to give a toll connection to the Peoples Exchange upon its qualifying as an operating utility authorized to do business in the form of the certificate issued by the Missouri Public Service Commission.

* * * *

EXTRA pay for imported employees has been curbed. The special telephone panel of the National War Labor Board recently recommended that the Ohio Bell Telephone Company should end by May 15th its practice of paying living expenses of telephone operators transferred to Dayton and other "labor-tight" Ohio cities. The practice was the main cause of the Thanksgiving Day strike last year which tied up long-distance service in Dayton, Cleveland, Washington, and other cities when affiliated members of the National Federation of Telephone Workers walked out in protest. The panel report, which was a 2-to-1 decision, said that the additional pay for the extra living expenses for workers imported to given communities "caused unrest, disharmony, inefficiency, and work stoppage."

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As an alternative the panel suggested that where future conditions necessitate the transfer of workers from their home exchanges to other points, terms should be agreed upon in advance between the company and the union. It further recommended that the transfer question be incorporated in the present company-union contract.

* * * *

PREPARATIONS to lobby for authority to make rural telephone loans by the Rural Electrification Administration were disclosed in the recent special bulletin sent by the National Rural Electric Coöperative Association to all its members. This bulletin referred to pending legislation in Congress which would authorize Federal financing for rural telephony. It attached a "co-op survey questionnaire" which the member co-op was asked to fill out and return promptly after polling its consumer membership if it does not already have the information requested.

This information dealt with (1) the number of rural consumers having telephones; (2) type of ownership—whether Bell, independent, or co-op; (3) grade of service; (4) basic monthly charge; (5) availability of extension without line charge to consumers not having a telephone; (6) number of consumers desiring telephone service from their REA co-op.

* * * *

COMMUNICATION requirements of the nation continued in 1944 to match the forward march of America's war power in the amount of telephone service provided by the Bell system. In the third full year of the war they have stood at new high levels at each quarter of the year. This was made public in the annual report of the American Telephone and Telegraph Company for 1944, released February 23rd. Walter S. Gifford, president of AT&T, who signed the report, stated:

All telephones essential to the war were installed without delay, although shortages of telephone equipment for civilian use pre-

sented a severe problem in many localities. The reason for this, of course, is that telephone manufacturing plants and their manpower must be devoted almost exclusively to production of war equipment for the Army and Navy.

For the same reason, long-distance lines and switchboards are insufficient to permit handling the increased long-distance traffic with peacetime speed, but calls important to the war have been put through promptly and the average speed of service has been well maintained, considering the extreme difficulties. Telephone men and women who have had more business to handle than facilities to handle it with have been greatly helped at their task by the understanding coöperation of the public. Likewise, within the telephone industry, there has been the most helpful coöperation between the Bell system and the 6,100 independently owned connecting telephone companies, which operate more than 5,000,000 telephones in all parts of the country.

The Bell system has already welcomed back approximately 3,300 employees who have completed their military service. Fifty-eight thousand eight hundred employees are now in the armed services.

Bell system operating revenues for 1944 were up 7.4 per cent over 1933, but operating expenses before taxes had increased 8.4 per cent; and after taxes operating income totaled only \$224,786,000, or \$11,450,000 less than in 1943. Net income of the system applicable to AT&T common stock was 8.89 cents per share in 1944 as compared with 9.50 in previous years. The number of shares outstanding in 1944 increased to 19,099,723, as compared with 18,719,815 in 1943.

Basing his observation on these figures, Mr. Gifford pointed out that "the Bell system has not profited by the war." Notwithstanding the record volume of business, earnings of the Bell system in 1944 were only 5.5 per cent of total capital invested (the same rate as in 1942 and 1943). These are the lowest earnings on investment during the history of the system, except during the bottom of the depression in the early 1930's.

MR. GIFFORD reported that there were 21,580,300 telephones in service in the system at the end of 1944, an increase of 333,700 for the year, including 51,000 acquired by purchase of the Keystone system. He noted a rise in the number

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of toll and long-distance telephone calls to a new peak of 1,400,000 last year, a rise of 8.3 per cent over 1943. Calls handled by the Long Lines Department were up 18 per cent from 1943 to a total almost as large as the combined volume of the years 1938 to 1940. Despite the increase in volume, the time required to complete long-distance calls was reduced from an average of 3.7 minutes to 3.2 minutes last year.

Mr. Gifford stated that possible sale by American Telephone of its telegraph business to Western Union Telegraph Company still was under consideration. Telegraph revenues comprise about 2 per cent of the Bell system's gross, he stated.

The importance of the industry's operations to the war was stressed by Mr. Gifford's statement that "this is a telephone-run war from factory to foxhole, and as the struggle has increased in scale and intensity, the need for the vital services performed by the Bell system has increased accordingly."

Construction of Bell system telephone plant in 1944, as in previous war years, was limited to necessary projects under controls and restrictions established by the War Production Board. Total expenditures for new construction amounted to \$170,000,000 in 1944. After the war the Bell system expects to have a record construction program for several years, and is now making preliminary plans for the same. Mr. Gifford said the system expects to play an active rôle in bringing television to the American public by providing network facilities over which television programs can be transmitted throughout the entire country.

* * * *

ORAL arguments on the proposed allocation of radio frequencies by the Federal Communications Commission were scheduled to commence February 28th. Briefs filed by the American Telephone and Telegraph Company, the United States Independent Telephone Association, and five independent telephone companies of the Gary group, asked the FCC to revise its tentative al-

locations so as to allow sharing on fixed public service circuits of radio frequencies for use only by other so-called "common carrier" (commercial communication companies) services. This was tantamount to seeking the allocation of certain frequencies for the exclusive use of the telephone industry.

The tentative FCC allocations already announced would require telephone companies to share such frequencies with various other noncarrier services. The brief of the AT&T was filed by its general attorney, T. Brook Price, in association with Edmund S. Hawley. The USITA brief was filed by its executive vice president, Clyde S. Bailey. The Washington and San Francisco law firm of Wheat & May submitted the Gary briefs.

The Frequency Modulation Broadcasters, Inc., on February 21st declared higher frequencies which the FCC has proposed for FM broadcasting would cost the public millions of dollars, paralyze a new industry for two years after the war, and discriminate against it in the highly competitive postwar radio market. In a brief filed with the FCC, the group charged that the commission had rejected the opinions of qualified industry experts and "gave undue weight" to its own witnesses. The brief asked for a reconsideration of the proposal, which was made public January 16th.

Under the proposal the FCC would raise the FM frequency range from 42-50 megacycles to 84-102 megacycles. The FCC said that it was trying to raise FM above sky-wave interference.

The FM group said that the industry, despite wartime handicaps, had in the last five years developed resources and facilities to meet an expected demand for an estimated 5,000,000 FM radio sets in the first year after the war. However, a change in the frequency range would "paralyze" these facilities, since present transmitters and sets would have to be redesigned and tested, they said.

"The change would cause a paralyzing delay during the postwar years when FM could move forward with great rapidity," the brief said.



Financial News and Comment

By OWEN ELY

Taxing Public Power Agencies

REPRESENTATIVE Carlson of Kansas recently introduced in the House a bill designed to eliminate some of the tax advantages that publicly owned utilities have over private utilities. Mr. Carlson referred to the "tax evasion racket" resulting from increased purchase of private utilities by municipalities and other public agencies. The rapid growth in public power generation is indicated by the accompanying table (millions of kilowatt hours):

	Privately Owned	Local #	Federal	Total Public
1930	89,648	4,538	465	5,003
1931	85,975	4,257	497	4,754
1932	77,472	4,460	445	4,905
1933	79,664	4,614	459	5,072
1934	85,627	4,822	357	5,179
1935	92,506	5,403	555	5,958
1936	105,159	5,950	1,072	7,023
1937	113,388	6,606	1,843	8,449
1938	106,959	6,693	3,029	9,722
1939	117,772	7,088	5,476	12,564
1940	127,642	8,758	8,584	17,342
1941	145,956	11,420	10,794	22,214
1942	159,549	12,739	16,893	29,633
1943	181,825	14,661	24,484	39,145
1944*	186,996	15,170	28,746	43,916

Includes coöperatives, power districts, state projects.

* Estimated.

In 1922 municipal electric utilities generated about 3½ per cent of all electricity, and governmental power projects only about three-tenths of 1 per cent. In 1930, as indicated in the table, all public agencies had grown to nearly 6 per cent of the total, and under the Roosevelt administration the proportion has increased to nearly one-fifth of the total.

Taxes paid by the privately owned electric utilities (class A and B) amount-

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ed to nearly \$700,000,000 in 1944. If public power agencies were placed on the same tax-paying basis (in relation to output) they would have paid about \$165,000,000 in local and Federal taxes. This fact is often lost sight of in reciting the benefits of public power projects. Moreover, the fact that such projects have usually been financed on an over-all interest cost of about 2½-3 per cent, as compared with about 5-6 per cent over-all cost for private utilities, is seldom stressed.

Government agencies such as the SEC are anxious to keep private utilities on a conservative financial setup, with preferably only half the investment represented by bonds. Utilities with sound records could probably be bonded up to 70 or 80 per cent of plant if they desired to take advantage of present market conditions to replace preferred stocks with debenture bonds (which would, incidentally, reduce their Federal taxes). Such a policy would not be favored by the government despite the use of 100 per cent bond financing for public projects, through use of Treasury funds or issuance of municipal or public authority bonds.

SECRETARY Ickes in his recent annual report recommended a policy of expansion for his department's power activities, which already include nearly one-half of industrial power production in the Pacific coast states. "If we could lump together as 'power' the final results of such developments (multipurpose dams and improved technological processes), then the Department of Interior would be the steward of an accumulation of power which is probably the greatest

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that was ever administered under one jurisdiction."

The difficulty with public power projects is that the political motive supersedes the limited-profit motive. Stress is laid upon the "social service" benefits which might accrue on a large scale to certain territories such as the Tennessee valley, the Columbia river valley, the Missouri river valley, etc. It is proposed to spend some \$700,000,000 new money for REA projects, putting in charge the former deputy director of the WPA. The danger is that these huge projects are usually planned and built without reference to the economic needs for power in the neighboring area. It is true that the power resources of TVA, Bonneville, etc., have proved useful during the war for production of aluminum and other "heavy duty" war materials. But this does not mean that the projects are economically justified on a peacetime basis. Engineers have shown that steam generation of electricity is now relatively cheaper and more dependable than hydro production. Instead of building huge new hydro developments far away from the market for power, wouldn't it be a saner policy to encourage private utilities to increase their power facilities in the areas where there is a potential market? Presumably such a policy would, however, have little political appeal to the present Washington régime.

New England Gas & Electric Association

(Series of holding company analyses.)

NEW ENGLAND GAS & ELECTRIC ASSOCIATION is the smallest of the three "New England" holding companies, consolidated system revenues amounting to about \$19,000,000 compared with \$74,000,000 for New England Power Association and \$31,000,000 for the utility subsidiaries of New England Public Service Company. The company controls through full equity ownership a number of electric and gas companies, most of them in Massachusetts

(excepting New Hampshire Gas & Electric Company and five others). The more important subsidiaries are as follows:

	1943 Sales of Electricity (Mill. Kwh.)	1943 Gas Sales (Mill. Cubic Feet)
New Bedford Gas & Elec. Light	302	1,080
Cambridge Elec. Light	152	....
New Hampshire Gas & Elec.	58	....
Cape & Vineyard Elec.	29	....
Plymouth County Elec.	23	....
Derry Electric	9	....
Cambridge Gas Light..	..	1,477
Dedham & Hyde Park G. & E. L. ....	..	249
Worcester Gas Light ..	..	2,459
Other companies	10	184

New England Gas & Electric's principal income is from dividends on common stocks, although small amounts are received in preferred dividends and interest. The subsidiaries are conservatively capitalized, with only \$9,350,000 funded debt, but the parent company has a top-heavy debt structure—five issues of debentures totaling \$35,854,300. One of the larger bond issues comes due September 1, 1947, and others are due in 1948-50.

In September, 1941, the SEC advised the Association that it might require it to change existing capitalization to one class of common stock and one class of long-term debt. Such debt would be limited to an amount which, added to the consolidated debt of subsidiaries, would not exceed 50 per cent of the consolidated net fixed capital of the subsidiaries. About a year later, the commission also started "death sentence" proceedings on the ground that the system constituted more than a single integrated system.

Proceedings before the SEC have been delayed because of litigation between the Association and the trustees of Associated Gas & Electric Corporation. The latter system or its affiliates own all the common and second preferred stocks, but these have no voting rights and New England is currently operated by four

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trustees. The suits filed by Associated involve about \$23,000,000. The claims were investigated by the SEC and the matter taken under advisement April 25, 1944. The commission has no power to give a money judgment, it is understood, but is limited to determining the ranking of various claims. The local courts will apparently await the decision of the SEC before acting.

THE consolidated balance sheet of New England Gas & Electric shows net plant account of about \$76,000,000 but this includes some \$33,000,000 book value for investments in subsidiaries' stocks in excess of the net assets at dates of acquisition. The original construction cost of subsidiaries has apparently not been determined, but the net book value is only about \$43,000,000. Assuming that the original suggestion of the SEC should be adopted, the parent company debt would apparently have to be reduced more than one-half to about \$17,000,000 to conform to the 50 per cent debt formula. Since geographical integration is also necessary, the logical solution would appear to be to dispose of outlying companies and retire a portion of the parent company debt.

Despite the parent company's over-capitalization, the flow of earnings from the subsidiaries is ample to support the debt. Interest charges have been earned with a fair margin for some years, and

on a system basis over-all charges were earned 1.42 times in 1943. The 95,847 shares of \$5.50 first preferred are also "respectable" so far as current earnings are concerned, \$11.61 per share having been reported on a consolidated basis in the twelve months ended September 30, 1944, and \$5.58 on a parent company basis. The bonds are currently selling around 93 and the preferred stock around 48. The first preferred has paid no dividends since 1940 and arrears now amount to \$43 a share.

Presumably, a recapitalization plan will be forthcoming in the next year or so. Judging from recent events, the SEC is no longer insistent on a 50 per cent debt ratio, at least for operating companies. Tide Water Power, for example, was recently permitted to recapitalize with a very high-debt ratio (in relation to written-down plant account). If New England Gas & Electric takes care of its other problems under the Utility Act, effects some reduction in its funded debt, and substitutes a new common stock for the present three issues, SEC approval might be obtainable, it is conjectured.

The Communications Stocks

THE communications stocks, during the six months since our last review of the group, have shown com-

COMMUNICATIONS COMPANY STOCKS

	Where Traded	Price About	Approx. 1944-5 Range	Div. Rate	Yield About	Share Earn.	Price- Earn. Ratio
American Tel. & Tel.	S	163	167-156	\$9.00	5.5%	\$8.76	18.6
New England Tel.	C	114	114-104	5.75	5.0	6.30	19.8
So. New England Tel. ...	C	130**	131-121	6.00	4.6	6.29	20.8
Mountain States Tel. & Tel.	C	131	136-127	6.00	4.6	6.95	18.8
Pacific Tel. & Tel.	S	128	128-118	6.25	4.5	6.58	19.8
General Telephone Co.	S	28	28-22	1.60	5.7	2.20	12.7
International Tel. & Tel. ...	S	24	26-12	...	..	1.10E*	21.8
American Cable & Radio ..	S	13	14-8	...	..	.80E*	16.3
Western Union Tel. Co. A ..	S	46	53-41	2.00	4.4	5.60E	8.2
Western Union Tel. Co. B ..	S	27	31-23	3.50	7.7

* Consolidated earnings.

** Bid price.

E—Estimated.

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paratively little average change. American Telephone had a sinking spell a few weeks ago, but later recovered; among the subsidiary minority stocks (which have rather thin markets) New England has advanced 6 points and Pacific 8 points, while Mountain States is down 3 and Southern New England is unchanged. General Telephone has advanced 3 points, reducing the yield substantially. International Telephone & Telegraph, a speculative favorite among the leverage "peace" stocks, has gained 6 points or one-third, but its affiliate, American Cable & Radio, shows no net change.

In the earnings column, American Telephone's consolidated earnings are down about 8 per cent from the previous year, though the subsidiary companies show moderate improvement in net. The poor showing of the parent company, due largely to an increase in Federal excess profits taxes of nearly \$9,000,000, seems to account for the difference in these results. While the parent company's earnings for the calendar year 1944 (\$8.42) were substantially below the \$9 dividend, there seems no reason to expect a cut in the rate; the system has net working capital of over \$7 a share and cash assets amount to over \$23 a share. Depreciation and maintenance charges in 1944 totaled over 28 per cent of gross, or only slightly less than in the previous year.

Columbia Gas Plan Gets Parent's Criticism

COUNSEL for United Corporation, Richard Joyce Smith, told the SEC at a hearing on the reorganization of United's subsidiary, Columbia Gas & Electric Corporation, that United disagrees with Columbia's proposal to recapitalize on a single-stock basis before eliminating Columbia's debentures and disposing of the common stock in Dayton Power & Light Company and Cincinnati Gas & Electric Company.

United, according to Mr. Joyce, sees no advantage to the corporation, nor to any class of its security holders, for com-

pellling the holders of Columbia's 5 and 6 per cent preference stocks, upon which not a single dividend is in arrears, and for which more than adequate earnings are indicated during the foreseeable future, to give up that security for an allocated amount of common stock.

The corporation believes instead that a plan for compliance with § 11 of the Holding Company Act can be evolved which will strengthen the position of the preferred stocks with benefit also to the holders of the junior securities.

Under Columbia's plan, filed with the commission December 21, 1944, the existing preferred, preference, and common stocks would be reclassified.

Unbroken Utility Common Stock Dividend Records

THE Exchange (magazine of the New York Stock Exchange) recently listed common stocks on the Exchange with unbroken cash dividend records ranging from 1848 to 1927. Considering the relatively small proportion of utility stocks to total listings, they make an excellent showing:

	<i>Year Begun</i>
Washington Gas Light	1866
Gold & Stock Telegraph	1875
American Tel. & Tel.	1881
Northwestern Telegraph	1882
Consol. Edison of N. Y.	1885
United Gas Improvement	1885
Hackensack Water	1886
Commonwealth Edison	1890
Philadelphia Elec. Co.	1902
Pub. Serv. Corp. of N. J.	1907
Southern Cal. Edison	1907
Detroit Edison	1909
Pacific Lighting	1909
Idaho Power	1917
Pacific Gas & Electric	1919
Houston Lighting & Power	1922
Louis. Gas & Electric (Del.)	1925
Pacific Tel. & Tel.	1925
West Penn Electric "A"	1926

An examination of the Curb list would also disclose long records, among which are National Fuel Gas (1909), Pennsylvania Water & Power (1914), Duke Power (1926), and Lone Star Gas (1926).

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INTERIM EARNINGS REPORTS

	End of Period	12-month Period			3-month Period		
		Last	Prev.	Inc. %	Last	Prev.	Inc. %
<i>Electric-gas Holding Companies</i>							
American Gas & Elec. Consol.	Dec.	\$2.32	\$2.23	4%	..	..	..
American Power & Lt. (pfd.) Consol.	Nov.	7.75	8.94	D13	..	..	..
American Water Works Consol.	Sept.	.54	.59	D8	.12	.11	9
Parent Co.	Sept.	.13	.16	D19	.04	.05	D20
Columbia G. & E. Consol.	Dec.	.59	.63	6	..	..	..
Com. & Southern (pfd.) Consol.	Nov.	8.01	8.58	D7	..	..	..
Elec. Bond & Share (pfd.) Parent Co.	Sept.	4.51	4.46	1	1.04	1.04	..
Elec. Pr. & Lt. (1st pfd.) Consol.	Oct.	9.51	10.78	D11	..	..	..
Eng. Pub. Service Consol.	Nov.	2.41	1.67	44	..	..	..
Parent Co.	Oct.	.66	.56	18	..	..	..
Federal Lt. & Trac. Consol.	Sept.	1.55	1.78	D13	.33	.40	D18
Middle West Corp. Consol.	Sept.	.94(b)	.98(b)	D4	.35	.40	D13
Nat. Pr. & Lt. Consol.	Nov.	.74	.80	D7	..	..	..
Niagara Hudson Pr. (pfd.) Consol.	Sept.	13.40	15.82	D15	3.15	3.52	D10
North American Co. Consol.	Sept.	1.83	1.75	5	.40	.43	D7
Parent Co.	Sept.	1.47	1.20	22	..	..	..
Public Ser. Corp. of N. J. Consol.	Dec.	1.06	1.10	D4	..	..	..
Std. Gas & Elec. (pr. pfd.) Consol.	Sept.	12.33	12.74	D3	.36	.72	D50
United Gas Improvement Parent Co.	Dec.	.38E	...	..	..	..	..
Consol.	Sept.	.57	...	..	.14	..	..
United Lt. & Rys. Consol.	Sept.	1.45	1.69	D15	..	..	..
<i>Electric-gas Operating Companies</i>							
Boston Edison	Sept.	2.13	2.24	D5	.37	.35	6
Central Illinois E. & G.	Sept.	1.84	...	..	..	..	..
Central Vermont P. S.	Nov.(c)	1.42	...	..	..	..	..
Commonwealth Edison Consol.	Sept.	1.79	1.73	4	.41	.40	2
Conn. Lt. & Power	Nov.	2.67	2.60	3	..	..	..
Cons. Edison N. Y. Consol.	Sept.	1.84	1.91	D4	D.01	.07	..
Parent Co.	Sept.	1.64	1.94	D15	.13	.10	30
Cons. Gas of Balto. Consol.	Nov.	3.87	3.80	2	..	..	..
Delaware Power & Light Consol.	Oct.	1.10	...	..	..	..	..
Detroit Edison Consol.	Dec.	1.03*	1.38	D25*	..	..	..
Houston Lighting & Power	Nov.	4.94	5.60	D12	..	..	..
Idaho Power	Dec.	2.39	1.82	31	..	..	..
Indianapolis P. & L. Consol.	Sept.	1.98	1.94	2	.34	.33	3
Pacific Gas & Elec. Consol.	Dec.	2.18	2.23	D2	..	..	..
Philadelphia Electric	Sept.	1.43	1.46	D2	..	..	..
Public Service of Indiana	Nov.	1.90	1.98	D4	..	..	..
San Diego Gas & Elec.	Nov.	.83	1.00	D17	..	..	..
Southern California Edison Consol.	Sept.	1.51	1.54	D2	.55	.50	10
<i>Gas Companies</i>							
Amer. Lt. & Trac. Consol.	Sept.	1.22	...	..	..	..	..
Brooklyn Union Gas	Sept.	2.38	2.23	7	.34	.30	13
Consolidated Natural Gas	Sept.	3.00	...	..	.14	.33	D57
El Paso Natural Gas Consol.	Nov.	3.53	3.56	D1	..	..	..
Lone Star Gas Consol.	Dec.	.90	.77	17	D.18	D.16	..
Oklahoma Natural Gas	Dec.	3.26	3.35	D2	..	..	..
Pacific Lighting Consol.	Dec.	3.31	3.21	3	..	..	..
Peoples Gas Lt. & Coke Consol.	Sept.	4.56	6.31	D28	.68	.98	D30
Southern Natural Gas Consol.	Sept.	1.86	1.86	..	..	..	..
United Gas Corp. Consol.	Nov.	.74(a)	...	..	..	..	..
Washington Gas Light	Nov.	1.98	2.36	D16	..	..	..

D—Deficit or decrease. E—Estimated. (a) Estimated *pro forma* earnings on new common stock (before sinking fund). (b) Nine months ended September 30th. (c) Eleven months ended November 30th. *Decrease due to special taxes.



What Others Think

The Coming Age of Conversation



WRITING upon the "challenges, opportunities, and problems of telephone and other communications business" in a recent issue of *Telephone Engineer*, Charles F. Mason, president of the Associated Telephone Company, Ltd., observed that "with the stepping up of air transportation, both in volume and speed, the postwar world is going to create a new tempo of life, requiring new and different standards of communicating speech." The influence, he thinks, of the advent of the robot bomb may be notable upon speed in transportation. In the art of communication, too, swift progress is being made. Such innovations as radar, walkie-talkie, ultra short radio relay, and television, will mean much in the latter field. The accent here, however, is rather on diversity than speed.

Commenting upon the outlook for the Coming Age of Conversation, the writer said:

... With more people traveling oftener and faster and farther, it only stands to reason that they are going to require more, and better, telephone service, local and toll. The rise of passenger travel has always gone hand in hand with the rise of toll traffic, as we well know from our telephone experience. There is no reason to expect that it will be any different in the future. . . .

For many centuries, transportation and communication were virtually identical. . . . Since the abrupt segregation of the functions of communication from transportation, the two services have tended to become more and more complementary rather than competitive. More physical travel meant more demand for communication.

This is "important to bear in mind," because, as he visualizes the outlook, "whereas future, dazzlingly swift, streamlined transportation of messages, parcels, and so forth may act as a spur to keep the communications services on

their toes by nibbling at the slower fringes of communications traffic, communication service itself must be prepared to step into new rôles of greater demand—better, wider, and more diversified service for the world of tomorrow."

THEN, to "translate these abstract ideas" into practical telephone talk, he sets down "six salient points" pertaining to the demands of the postwar American world:

1. *The telephone business must go ahead on the assumption of more and more traffic, both local and long distance. . . . there is hardly a telephone company in the United States today that couldn't use more plant and improve or replace some existing plant. This is especially true since the enforced maintenance and construction holiday resulting from war restrictions. This means that in the Coming Age of Conversation there will be literally hundreds of thousands of dollars of telephone business lying around all over our great country just waiting for us to build and plan for it. . . .*

2. *Small independent companies might well look to the strengthening of organization. During the war experience a good many companies have found that they could "get by" with a surprisingly smaller amount of personnel and plant organization. . . . In the process there has arisen a dangerous attitude on the part of some managements. There is the temptation to feel that these war-born and depression-born expediciencies can be carried forward in whole or in part into normal operation. . . . I am very much afraid that any management which thinks it can get away with that type of "make do" organization in postwar years is in for plenty of grief.*

3. *Good service is preferable to bargain rates. There have been times recently—perhaps under pressure of political criticism—when companies have been inclined to doubt this truism of the telephone business. In my opinion many regulatory bodies who have been obsessed with a "rate complex" are awakening to the fact that their responsibility*

WHAT OTHERS THINK

to the public and the index of their permanence and value to America's social system are not always prefaced with a dollar sign but are bearing in mind the even greater importance of a high grade of service.

Even the most superficial check-up or subscriber poll will promptly remove any doubt that the average subscriber is willing to pay for better service if he understands—through appropriate educational methods which an alert telephone company will surely apply—that he is getting it and is convinced, on the merits of the service he is getting. On the other hand, no subscriber group will be long satisfied with "bargain service." . . . The American public has been educated to *de luxe* taste by the high standard of service already attained by the telephone industry. Anything less, in the postwar period with its expected increase in service demand, will surely bring on its own penalty. The majority of telephone subscribers would actually pay more than they are paying for service now—if they could be convinced that they would get the full benefit of the difference. . . . it is a preferred obligation of the operating telephone industry in these times to set up plans for a strong organization and good service—to handle the Coming Age of Conversation. If the current rate structure of the particular company will underwrite such an organization, well and good. If, on the other hand, the rates are too low the utility management should not hesitate to go to its commission with its plans in its hands for "building an organization" and ask for the means of putting it into effect. This puts the responsibility, in part at least, up to the commission. And the average commission will see the point and go along if the company's educational work is up to par.

4. *Good employee relations can be the key to the protection of private enterprise in the telephone business.* I have been surprised somewhat by the failure of both management and labor in the utility business to realize that it is to their best interest to go down the road together rather than separately in opposing public ownership. Recently the telephone industry witnessed the first overt move in the direction of public ownership in the telephone field with the introduction of a bill in Congress which would authorize the making of Federal loans to municipalities and to other public agencies and semipublic agencies (such as cooperatives) to go into the telephone business for the promotion of rural service. Historic examples are so glaring and recent that it is hard to see how anybody could be confused very long on this issue.

5. *The telephone industry must aggressively protect its economic position by capitalizing all opportunities for greater service.* In the Coming Age of Conversation there will be many new media. The recent allocation

hearings before the Federal Communications Commission regarding the radio spectrum were really an eye opener with respect to possibilities in the field of radiotelephony. The automobile telephone, train, plane, and ship-to-shore telephone, long- and short-haul toll via radio relay, are all in the picture. We must face the fact that some industry is going to go into these various phases of communications business. . . . It is definitely the responsibility of the industry, through its state and national associations and individual company efforts, to . . . work them [their claims] in these new fields of service. . . . Certainly if the telephone industry goes ahead, as it lawfully may, and establishes a going concern operation in these fields and can arouse a public acceptance and reliance on its service, the public will protect it from any subsequent attempt to displace it. The telephone industry is perhaps in a better position to branch out along these lines than many would-be rivals.

6. *Broad vision and varied methods may be needed to improve existing service standards in the immediate postwar years.* Many company managers are looking forward to the time when they can break traffic bottlenecks by expanding facilities and lessen public annoyance over busy signals and so forth. But physical expansion may not be the entire answer, although it is doubtless most important. . . . I must confess that I do not know any single answer or set of answers to supplement physical plant expansion. But I have often speculated as to whether there isn't a chance for tactful education in this field.

LOOKING at the question of employee relations, listed under number 4 of his salient points, Mr. Mason makes these further thoughtful and constructive observations:

Free labor and free enterprise must go hand in hand since one cannot long exist without the other. Where is labor free today except in nations which permit private enterprise? . . .

Only in America and similarly capitalistic countries and—this is most important—only in private enterprise even in America does the right to strike exist. Surely enlightened labor leaders should realize that with the coming of public ownership in the utility business, or any other business, the right to strike or to bargain collectively becomes dominated by government control and probably destroyed eventually. You cannot strike if you work for the government.

On the side of management it is necessary to meet labor half way in those concessions which are economically feasible so that labor may know that management is doing the

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best that it can and that its own interest is correspondingly protected.

Likewise, management must resist any temptation to flirt with those who would collaborate with socialistic forces aimed at liquidating private enterprise. When private management and organized labor are united in good relations and have confidence in each other, the forces of socialization will not and cannot prevail. When they are disunited, however, and there are those who, following the old line of "divide and conquer," bend every effort towards such disunion, management and labor can become easy conquests of the same totalitarian trend which has characterized the tragic history of recent years in Europe and elsewhere.

Management should not hesitate to enlist the aid and cooperation of organized labor on this point, and labor is within its rights in calling upon management to make good on its responsibility to protect private enterprise with a firm foundation of good employee relations.

These comments present vividly certain basic truths in the matter of management-labor relations, and the suggestions made warrant the attention of both management and employees in all types of utilities.

—R. S. C.

REA Outlines Ambitious Postwar Program

A PRELIMINARY report on "Rural Electrification after the War," submitted by the REA Postwar Planning Committee for Department of Agriculture consideration, discloses interesting and instructive studies regarding the program for "the national job still to be done" in this field, as visualized by REA planners.

The program as outlined is an ambitious one and, if carried out, will be far-reaching in its effect. While the plans appear comprehensive, a study of the report reveals a certain manner of setting them forth, which tends to distort somewhat some of the aspects in the over-all picture of rural electrification.

This report is divided into six parts, as follows: (1) progress and present status, (2) objectives of a postwar program, (3) reasons for an accelerated program, (4) other factors affecting the program, (5) scope of the program, and (6) how the job can be done.

Accompanying each of these sections are graphic tables which illustrate vividly portions of the text to which they apply. They serve to point up, and emphasize, the statements as to the program REA is advocating for extension of rural electric service.

The report starts off, in Part I—"Progress and Present Status of Rural Electrification"—by stating:

Farm electrification advanced very slowly during the 53-year period from 1882, when

the first central generating system went into service, to 1935, when the Rural Electrification Administration (REA) was created. A few farmers were connected to central station power prior to World War I, and the early twenties saw a short-lived spurt in which progress made in electrical engineering was reflected by a small increase in the number of farms served. . . . only 10.9 per cent of all U. S. farms had received central station electric service by 1935. Farmers and farm organizations, chafing at the slow rate of progress, increased their demands for government action. One result was the establishment of REA with an action program primarily to make service available to these farm people who were without electric service, and to related agricultural community action.

The U. S. Census of 1940 reported 6,097,000 farms in the United States, of which 1,853,000 were receiving central station electricity. Since the census enumeration it is estimated that 704,000 farms have been electrified, raising the total number to 2,557,000 as of January 1, 1944. . . .

According to the 1940 census there were 15,709,000 rural dwellings. Of this number, 7,642,000 were classified as farm, and 8,057,000 as nonfarm dwelling units . . . a total of 2,351,000 rural farm dwellings and 6,185,089 rural nonfarm dwellings were reported to have electric service in 1940.

The difference in the census figures as between farms and rural farm dwellings is explained by the definition of rural dwelling used in the census classifications: ". . . the living quarters occupied by, or intended for occupancy by, one household. . . . Rural nonfarm units are those located outside the boundaries of urban places, but not on farms. . . . Rural farm units are those located on farms outside urban places. . . ." Since there are sometimes several dwelling units

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"DID THE COURSE DO ANY GOOD? SAY, I CAN COOK A BETTER DINNER OUT OF MY SISTER'S GARBAGE THAN SHE CAN WITH THE ORIGINAL FOOD!"

on one farm, the number of farm dwellings is greater than the number of farms.

... 829,000 farms and rural homes have been connected to central station power lines since the 1940 census was taken. This leaves a total of 6,344,000 rural farm and rural non-farm dwelling units without electric service. About one million of these appear to be within the service area of existing urban power systems. . . . To bring electricity to them is a challenging job.

THE comment is made that REA was created by executive order of the President in 1935, and that the Rural Electrification Act of 1936 empowered REA to make self-liquidating loans to qualified organizations, with preference to nonprofit and cooperative organizations, for the construction of power fa-

cilities to persons in rural areas without central station service, and for financing the purchase of electric facilities and equipment by rural consumers. It was said:

Up to June 30, 1944, REA had approved loans to 887 borrowers totaling \$498,811,446, of which \$387,630,670 had been advanced; 815 borrowers had 398,000 miles of power lines in service on that date, bringing electricity to 1,152,031 consumers, of which 889,051 were farmers.

As an indication of what the report terms the "stimulating effect of this dynamic Federal program," it is noted that "between 1935 and 1944, the number of farms electrified increased from 740,000 to 2,557,000" and, while no figures are

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available, the "indications are that non-farm rural service kept pace." Thus, it may be seen that the increase of 1,817,000 farms which were electrified in the 10-year period, since REA started, was about equally divided between those financed by REA and those served by private electric utilities.

In Part II, dealing with "objectives," the principle is laid down that

Central station electric service at low-cost nondiscriminatory rates should be extended to all rural communities and farms on an area-wide basis as rapidly as materials and manpower will permit.

Then it is stressed that there should be "full use of electricity for rural community service—it is basic to the effective use of rural schools, churches, and community centers, to the establishment of community health clinics, service enterprises, entertainment, and recreational facilities. . . . One of the possibilities is the use of rural power lines for local and long-distance telephone service."

And, in addition to this broad field, it is urged that the "development of every

type of suitable rural industry in every electrified rural area should be considered part of a national rural electrification program. To be of maximum service to farm people, such developments should be coöperatively owned and controlled wherever possible."

SUCH objectives as these are worthy ones, and, while in some aspects they may seem to be rather far-reaching, the accomplishment of such a program should be of constructive economic benefit, not only to the communities directly concerned but to the nation. It is to be borne in mind that it is of a pattern with the intent of the administration to foster profound changes in rural life. The REA setup of long-term loans, at extremely low interest rates, is a distinct step in that direction.

In Part III, emphasis is laid, in setting forth reasons for an "accelerated" program, upon the stimulation that would be expected to result for private employment:

The shifting from a war to a peace econ-



STATUS OF THE ELECTRIFICATION OF FARMS AND RURAL DWELLINGS IN THE UNITED STATES

January 1, 1944

Status of Farm Electrification

Total Farms (U. S. Census 1940)	6,097,000
Farms Electrified As of 1940 (U. S. Census)	1,853,000
Estimate of Farms Electrified from 1940 to 1944	704,000
Farms Unelectrified As of 1/1/44	3,540,000

Status of the Electrification of Rural Dwellings

All Rural Dwelling Units As of 1940 (U. S. Census)	
Rural Farm	7,642,000
Rural Nonfarm	8,067,000
Grand Total Rural Dwellings	15,709,000
Rural Dwellings Electrified As of 1940 (U. S. Census)	
Rural Farm	2,351,000
Rural Nonfarm	6,185,000
Rural Dwellings Electrified from 1940-1944	
Rural Farm	704,000
Rural Nonfarm	125,000
Estimated Farm and Nonfarm	829,000
Total Electrified Rural Dwellings 1/1/44	9,363,000
Rural Dwellings Unelectrified 1/1/44	6,344,000

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omy will release increasing numbers of men and women from war production and from the armed forces. If we want to avoid large-scale unemployment, we must create as many job opportunities as possible. The construction of rural power lines, the installation of wiring and plumbing, and the purchase of electric farm and household equipment by new and old rural consumers will necessitate industrial production involving nearly three million man-years of labor. Such a program will therefore be extremely helpful in stimulating private employment.

Also, that the program is "self-liquidating" is emphasized:

The program outlined in this statement considers only self-liquidating developments. It will therefore not be a burden on the taxpayers of the nation. On the contrary, it will correspondingly reduce the need of tax-supported public works employment. Because of these facts, its acceleration during the reconversion period is particularly desirable.

One is reminded, with regard to this "self-liquidating" reference, that, while the \$387,630,670 advanced to borrowers—mentioned above—may be considered by REA as a revolving fund, it came originally from the taxpayers, the source of all government moneys. So, in the final analysis, taxpayers are definitely interested.

A further argument is advanced by comparisons with other countries:

In 1935, when less than 11 per cent of American farms had electric high-line service, farm electrification had reached 85 per cent in Denmark, 90 per cent in Germany, 95 per cent in France, and practically 100 per cent in Holland. Even today, with slightly more than 40 per cent of our farms electrified, we are still far behind these and other countries in that respect.

SUCH a comparison as this can be quite misleading, for it depends upon the definition of the term "farm electrification." As generally used in the United States, it means the supplying of electric service directly to individual farms of varying size, up to, perhaps, 1,000 acres or more. In Europe "farm electrification" can well mean something very different. It is true of most of the agricultural sections in Holland and Denmark, and also in many parts of rural France, that the farms average only a few acres

in size. They either adjoin or lie close to the villages. Many of the farmers tilling these outlying lands actually live in the near-by villages. That is where they make their "farm home." These village farm homes may have electric light, but to construe such a service as "farm electrification" does not really give a comparable picture with what is generally known as farm electrification in the United States. Having traveled, in recent years before this war, by train and motor over many miles of rural Holland and France, without seeing a single electric pole line serving the farms en route, it would interest this writer to know the source of the foreign farm electrification figures, as quoted above from this report.

Considerable space is devoted to detailing the importance of electricity to farm production and management; that it is a requirement for better farm family living; and that "rural leaders recognize that many of the important elements for bringing about and maintaining higher community standards are dependent on the wide and efficient use of low-cost electric power." Also, extended reference is made to the part that electric power and electrical farm equipment may play in facilitating proper land use.

Then the question of the development of rural industries is gone into. Citing TVA as an example of success in such activities, it is observed that "widespread availability of ample low-cost power makes possible decentralization of industry. REA experience shows that with the availability of reasonably priced power comes a substantial increase in the number of small rural industries."

As one reads this lengthy list of reasons (only sketchily noted herein) for the proposed "accelerated" program of farm electrification, as contemplated by the REA planners, certain points stand out which appear to be characteristic of the philosophy prompting this agency's policies.

The impression is given that all of these improvements and advantages to be brought to rural communities, which would make life in the country almost a

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duplicate of life in the city, will be possible of attainment *only* through the application of electricity to a multitude of uses. No account seems to be taken of the human element—of the individuals who are, after all, the important factors in carrying out the many social objectives outlined as desirable. In short, the high note all through this report is the reiterated assertion that it is "electricity" which will make possible all these proposed changes in rural living.

Another point to be noted is the recurring statement that wherever electricity is made available it must be "low-cost" power. Several pages are devoted to that phase of rural electrification in Part IV of the report. Inasmuch as the details set forth demonstrate quite fully the policies of REA in this regard, the following paragraphs relative to the cost of obtaining service, and the principles of area coverage, are quoted:

The early history of rural electrification showed that the average farmer cannot afford electric service if he has to lay out a considerable sum of money to get the line to his farm and if he must agree to a high minimum service guaranty and to high service rates. REA has demonstrated in nearly every state that electric service on a self-liquidating basis can be brought to farmers without such inequitable requirements. The example set by REA-financed cooperative

power systems has resulted in a lowering of requirements by most power companies supplying rural service. If this progressive policy is adhered to by all agencies building rural lines in the postwar period, the rural demand for electric service will for some years to come be ahead of the ability of all agencies combined to satisfy it fully.

The program outlined in Part V is based on the assumption that rural electrification will be carried out as far as possible on an area coverage plan. That this can be done has been demonstrated by electric coöperatives in many places. In fact, development on an area-wide plan offers the only assurance that virtually all rural homes and other rural establishments, such as schools and churches, can obtain electric service at reasonable rates without the need of subsidies or grants-in-aid of some sort.

Area coverage merely means making electric service available to all rural establishments in a given area, without leaving gaps of unserved sectors within the area or leaving stranded farms located on the fringes. In applying the principle, the boundaries of an area are determined largely by geographic and physical considerations, to assure compact operating systems.

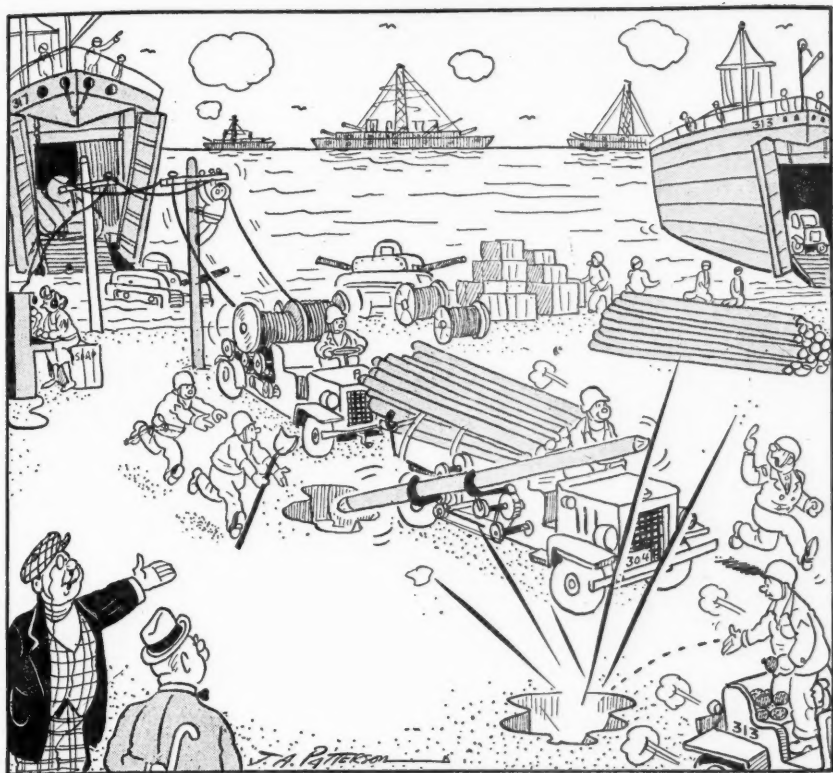
The practice, all too frequent in the past, of providing service selectively only to those farms and rural homes readily accessible from the highways, or located in densely populated areas, or promising relatively large immediate loads, and ignoring other potential consumers, has deprived many farms of electric service. This practice of "skimming the cream" not only restricts the number of dwellings that can have service, but also results in high construction costs be-



ESTIMATED AMOUNT OF MAJOR ELECTRICAL EQUIPMENT ON UNITED STATES FARMS—1943

	<i>Per-Cent On Electrified Farms</i>	<i>Number of Units</i>
<i>Home appliances</i>		
Radios	90	2,208,690
Irons	85	2,085,985
Washing Machines	55	1,349,755
Refrigerators	40	981,640
Toasters	30	736,230
Vacuum Cleaners	20	490,820
Hot Plates	15	368,115
Coffee Makers	9	220,869
Electric Ranges	4	98,164
Roasters	2	49,082
<i>Farm Equipment</i>		
Brooders	25	613,525
Water Pumps and Installation ...	25	613,525
Electric Motors	20	490,820
Cream Separators	15	368,115
Milking Machines	10	245,410
Milk Coolers	7	171,787
Poultry Water Warmers	2	49,082
Dairy Water Warmers	1	24,541
Feed Grinders	1	24,541

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"OH, I SAY, THESE YANKEES CARRY STREAMLINING A BIT FAR, DON'T YOU THINK?"

cause of piecemeal additions from time to time. Area coverage appears to be the only way substantial progress in rural electrification can be made without subsidy. Experience has shown that construction to serve all rather than a selected few permits mass production methods in the development and more efficient management in the operation of these local systems. The net results are lowered costs and availability of high-line service to all people in a rural area. . . . The goal of area coverage rural electrification will not be reached if power companies attempt to revive the rather general prewar practice of "cream skimming."

As to the demand for electric household and farm productive equipment which may be anticipated, the report contains a table indicating the relative degree of saturation of some of the

major appliances at the present time. Reference to the figures as shown in this table discloses some marked contrasts, suggesting possibilities for postwar installations, especially in farm equipment.

Setting forth the REA concept of financing line construction, the report states:

Before the war, the electric utility industry generally did not request government financing for what rural lines it decided to build. There is no evidence to indicate that there will be any change in this policy after the war.

However, past experience indicates that a large part of rural line construction after the war will have to be undertaken by non-profit, farmer-owned cooperatives if universal low-cost electric service is to be made available to rural America. How large this

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construction program will be and how rapidly it can be carried out will depend primarily on action of the United States Congress. The attitude of the Congress appears to be indicated by the recent passage of the so-called Pace Bill, which lowers the interest rate on REA loans below the scale originally set in the REA Act of 1936, and extends the permissible period of amortization. This broadening of the loan financing conditions will make it possible for REA-financed coöperatives generally to do a more complete area coverage job than would otherwise be the case.

In Part V, covering the scope of a 5-year program proposed, the report sets forth the REA calculations as follows:

It is estimated that about 952,000 of the 6,344,000 unserved rural dwelling units . . . [shown in the table on page 374] are located in suburban areas and can be served by urban power systems. This reduces to 5,392,000 the number of unserved rural dwellings which will need to be considered in a strictly rural postwar electrification program. . . . it is estimated that the cost of line construction, based on REA prewar construction costs, to reach these 5,392,000 potential rural consumers, will amount to about \$1,600,000,000, and that about 800,000 man-years of direct and indirect labor will be required to do the job.

No one can foretell how long it will take to complete this job. But it is REA's considered estimate that about 3,655,000 of these potential rural consumers can be reached within five years after line construction materials have again become generally available. This would, of course, require an intensive construction program not only by REA borrowers, but also by all other groups and agencies concerned with supplying rural electric service. . . .

This program . . . will require the expenditure of about \$1,042,000,000, based on REA prewar construction costs, for construction of lines to serve 3,655,000 additional rural consumers. . . . It is based on the validity of the assumption that (1) materials and manpower will be available as rapidly as needed; (2) private and public rural power systems are willing and able to undertake area-wide line construction programs.

THEN, estimates are given of the expenditures that may be expected by newly connected consumers for wiring, plumbing, farm equipment, and household appliances as a result of such a 5-year program. The sum of such expenditures, by both old and new consumers, is

stated to total \$4,526,000,000. Supporting figures are given in some detail for the several items and amounts which make up this total, and the method of arriving at it. These figures, the report states

. . . leave out of consideration the demand for wiring and electrical equipment in connection with the electrification of schools, churches, and other community buildings, the establishments of new and the electrification of existing rural service and processing industries and other commercial enterprises. But even with that omission the rural electrification program, if vigorously carried out, can account for five and a half-billion dollars of national industrial production, and can result in two and three-quarter million man-years of private employment, largely within a period of five years.

While the foregoing has reference to a preliminary report on a proposed 5-year program as recommended, it is stated that

The Department of Agriculture has proposed that the Rural Electrification Administration complete necessary plans for a 3-year program of rural electrification through REA-financed rural power systems. Preliminary steps have already been taken in the planning of such a 3-year program.

This proposal contemplates that central station service be made available, under the provisions of the Rural Electrification Act, to slightly more than 1,250,000 farms and rural homes of America. This program would require . . . total loans of about \$579,000,000 for the construction of distribution lines and installation of electric facilities. It would require nearly 300,000 man-years of direct and indirect labor. Estimated expenditures for wiring, plumbing, farm and household equipment, would run to an additional \$700,000,000.

For the purpose of financing the construction of necessary lines and installations of related facilities in this REA program, the established REA policy of making only self-liquidating loans to qualified borrowers will be continued. These interest-bearing loans will be in accordance with the provisions of the Rural Electrification Act of 1936, as amended.

IN the closing section of this report, Part VI—"How the Job Can Be Done"—much is stated which points up clearly the guiding principles under which REA operates. Inasmuch as it touches upon relations which may ensue,

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in the carrying out of this proposed program, with both private power companies and with state utility commissions, the text of this section should be of especial interest to each of those groups:

State utility commissions have recognized generally that the REA-financed electric co-operatives, operating on a nonprofit basis and for the benefit of the member-consumers, need not be regulated in the public interest. Regulation is intended to protect the buyer from exploitation by a seller with monopoly rights. A coöperative enterprise is self-regulatory because it is owned and operated by the members served. As community enterprises, electric coöperatives have the objective of low-cost area-wide electric service to all potential consumers. . . .

State utility commissions are, of course, interested in maximum low-cost rural electrification. They can aid that objective by exercising their regulatory powers to assure adequate low-cost supplies of power to coöperatives, by encouraging liberalization of rural line extension requirements of private power companies, and by eliminating rate discriminations and promoting rate reductions for rural power service.

They can also aid the objective of full area coverage by preventing further "cream skimming" by power companies. If a power company is not willing to guarantee the extension of rural electric service on an area-wide basis, the people themselves should be given full opportunity and encouragement to undertake the development of both high- and low-density territory combined on a nonprofit basis.

It might be observed that these suggestions directed to state utility commissions relative to their procedure in cases concerning the relations between private utilities and rural co-ops, would seem to be gratuitous, if not presumptuous, advice. The record of the state commissions indicates a care for the ultimate consumer, and due consideration of the practical economics where rural extensions are in question. They can be depended upon to treat each case upon its individual merits. Furthermore, the claim that rural co-ops "need not be regulated in the public interest" because they are "self-regulatory"—that, surely, is "drawing a long bow" pretty strongly.

Dwelling upon the ways in which agricultural leaders and educators can help in this program, the report continues:

Concerted action on a national scale is es-

sential to continued advancement. . . . The [state agricultural postwar planning] committees can do much through influencing the thinking of groups concerned with other phases of rural community improvements . . .

To thus urge the necessity of planning by community and state groups, the helpfulness of exchange of views, and "concerted action . . . is essential"—all this seems very much of a pattern with the aims and practices of utility holding companies in rendering services to affiliated operating properties. In their case they are now hedged about by SEC rules and restrictions. REA, however, not being subject to SEC jurisdiction, is free to go to any limit in urging all manner of groups to join in forwarding its aims.

THIS procedure also calls to mind the critical attitude of the Federal Trade Commission, in past years, toward private utilities' activities in enlisting the coöperation of educational interests in their rural electrification programs. But, here also the same freedom from jurisdiction is enjoyed by REA. Yet, how anomalous is the situation which is thus presented.

Certain policies and acts are strictly forbidden to private utilities in the conduct of their business. A government agency like REA, however, is under no such restrictions, and can go to any lengths, as illustrated by the quotations above, in furthering the program it wants to carry out.

In summing up the impression made by the report as a whole, it seems to be a statistical blending, if not a comparison, between a hypothetical 5-year plan and a definite REA 3-year loan-authority plan envisaged by the Lucas Bill.

Also, considering that REA suggests that it alone be given nearly \$600,000,000 for the 3-year plan (anticipating similar additions would be authorized for the remaining two years), it would seem to indicate that REA is assuming responsibility for virtually the *entire* 5-year program (estimated to cost \$1,000,000,000), leaving little to be done in this field by private utilities, municipalities, etc.

—R. S. C.

MAR. 15, 1945



The March of Events

Rivers and Harbors Bill Passed

A \$500,000,000 bill providing for postwar improvement of American rivers and harbors recently awaited only President Roosevelt's signature to become law. It was passed by the House of Representatives on February 22nd on a voice vote. This is the first rivers and harbors legislation passed in several years.

It provides for 300 projects, including such major ones as the \$60,000,000 Alabama-Coosa waterway, the \$15,000,000 Trinity river program in Texas, the \$25,000,000 Illinois waterway, and the \$58,625,000 Snake river development in Wyoming.

Chairman Mansfield of the House Rivers and Harbors Committee urged passage of the measure so that Army Engineers can complete plans for the projects and be ready to execute them after the war. They are expected to provide a large reservoir of jobs. Under administration policy, the only improvements to be carried out before the end of the war are those few deemed of military importance. Among these is a \$150,000 project for Baltimore harbor.

Asks Sway over Hydro Power

SECRETARY Ickes, whose agencies already produce about 45 per cent of the electric power consumed in 5 states of the Pacific Northwest and 50 per cent of the power used by war industries in the Pacific Southwest, hailed the advantages of public ownership in his annual report as Secretary of the Interior made public last month.

He also renewed a recommendation that the department should encompass natural power resources of the country in its rôle as steward for federally owned land and developments. In a letter, transmitting the report to President Roosevelt, he said:

"If we could lump together as 'power' the final results of such developments (multipurpose dams and improved technological processes), then the Department of Interior would be the steward of an accumulation of power which is probably the greatest that was ever administered under one jurisdiction."

Senator James E. Murray, Democrat of Montana, said that while he had the highest regard for Mr. Ickes he did not like the way in which he sought to develop the river basins. Recalling the long fight of local elements in

the Northwest to exert control over the Bonneville dam project, the Senator said he believed that Mr. Ickes wanted to "exert control" from Washington over programs which should be worked out "by the people in the area who have a right to determine their own development."

It was at the conclusion of the letter to the President that Mr. Ickes took up public ownership. Pointing out that steam propulsion had served "to reshuffle our industrial processes" and that electricity and automotive transportation had "revolutionized our domestic economy," he continued:

"The advent of hydroelectricity, so developed that it can revolutionize heavy industry, and accompanied by equally developed supporting facilities, serves mainly to introduce a new generation to a historic occurrence."

Looking to the future, Mr. Ickes went on: "Our job soon will be to turn this vast block of power from war to peace. It is a Herculean job, but I think that we can master it by shifting, gradually if possible, from war to its nearest economic equivalent in the field of conservation; namely, regional development. But it must be regional development at its boldest."

SEC Sanctions Stock Deal

THE Securities and Exchange Commission on February 21st approved a sale of the outstanding securities of the Iowa-Nebraska Light & Power Company by the Continental Gas & Electric Company to the Central Electric & Gas Company for \$4,325,000. Iowa-Nebraska Light is a subsidiary of Continental Gas. Central Electric is an operating public utility and not a subsidiary of any company.

Central Electric, after it acquired the 33,684 shares of common stock of Iowa-Nebraska Light, would become parent of the latter. The purchasing company, however, proposed immediately to acquire all the properties and assets of Iowa-Nebraska Light, to assume all its liabilities, and to dissolve it. Iowa-Nebraska Light will declare and pay to Continental Gas, prior to the sale, a cash dividend of \$465,000 out of paid-in surplus.

Continental Gas is an intermediate holding company in the United Light & Railways and United Light & Power Company holding company system. The commission reserved jurisdiction over use of the proceeds of the sale by Continental Gas.

THE MARCH OF EVENTS

REA Allotments

THE Rural Electrification Administration has made loan allotments totaling \$681,000 to ten rural cooperatives in Delaware, Illinois, Minnesota, Missouri, Nebraska, New Mexico, North Carolina, South Dakota, and Utah, it was announced recently.

The loan funds will be used mainly for the extension of electric service to farms located near existing lines. No construction will be undertaken which does not meet with the approval of the War Production Board.

This brings REA allotments to \$521,250,-801.79, of which \$22,371,000 represents operations during the current fiscal year.

SEC Permits Retention

THE Securities and Exchange Commission last month found that Central & South West Utilities Company, intermediate holding company in the Middle West Corporation system, may retain in its system the major electric properties owned by four of its subsidiaries.

These are Public Service Company of Oklahoma, Southwestern Gas & Electric Company, West Texas Utilities Company, and Central Power & Light Company. The system operates principally in Texas and Oklahoma, but also in Arkansas and Louisiana.

The commission ordered Central & South West, however, to take such steps as shall cause it to "cease to own or control, directly or indirectly, and dispose of all its direct or indirect interest" in the following businesses:

The water properties of Central Power & Light Company and all nonutility operations in the Big Bend district of Texas; West Vernon Sewer Company; all water distribution properties of West Texas Utilities Company; the ice properties of Public Service Company of Oklahoma; all natural gas properties of Public Service Company of Oklahoma, save those used to provide fuel for electric-generating purposes; the water properties of Southwestern Gas & Electric Company; Peoples Ice Company; and the ice properties of Southwestern Gas & Electric Company.

This order provided, however, that with respect to Peoples Ice Company and the ice properties of Southwestern Gas & Electric Company "and only respecting these items" the order shall become effective thirty days from February 16, 1945.

FPC Sets Gas Hearing Date

THE Federal Power Commission last month announced its order setting the first public hearings in the commission's fact-finding investigation into the conservation and utilization of natural gas for May 1st in Kansas City, Missouri.

The place of hearing and the rules and procedure for its conduct would be announced later, it was said.

Procedure for participation in the hearings was provided in the order, which stated as follows:

"All persons desiring to participate in such hearings shall file with the commission at least thirty days before the date set for the hearing at which they desire to appear a written request, containing a brief synopsis of the evidence they desire to present."

The hearing announced last month was in furtherance of the investigation instituted on September 22, 1944, by the commission on its own motion into the extent and probable life of the nation's natural gas reserves; present and prospective measures for preventing waste and prolonging the life of such reserves; the present and probable future utilization of natural gas for domestic, commercial, and industrial purposes; the extent, character, and results of the competition of natural gas with other fuels, and such related matters as may be helpful in the administration of the Natural Gas Act or in determining what additional legislation, if any, should be recommended at this time.

The time and place of other public hearings, the commission said, would be fixed by subsequent orders.

Gas Crisis Again Hits Area

THE Office of War Utilities announced on February 18th that the Appalachian area was in the grip of another gas crisis and appealed to the public to burn less.

"Industrial plants making war weapons are being shut down to conserve gas," Edward Falck, director, stated, "and it is imperative that everyone else using gas reduce consumption to a minimum so long as the cold spell lasts."

He gave out the following emergency program:

"Don't use your oven at all. Limit range use to one top burner at a time, then only for preparing meals. Don't use any portable gas heaters. Set your gas furnace thermostat down to 65 degrees or lower, and don't use hot water except where absolutely necessary."

The OWU said the crisis affected natural and mixed gas "in the Appalachian area, including western New York, western Pennsylvania, Ohio, West Virginia, Maryland, Virginia, and the District of Columbia."

Bill to Regulate Trucks

THE Interstate Commerce Commission would have power to overrule inequalities in state trucking regulations under legislation introduced last month by Senator Magnuson, Democrat of Washington.

The Senator said the measure was an interim proposal to remain effective until state laws could be revised to remove a lack of uniformity in regulations as to size, weight, and safety devices of trucks.

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California

Hydroelectric Plan Proposed

THE Fresno Irrigation District, Fresno, has filed application with the Federal Power Commission for a 3-year permit for a hydroelectric project in Fresno county, it was announced recently.

The project would include two dams providing for a water storage capacity of 1,128,000 acre-feet, two tunnels, and three powerhouses having an installed capacity of about 183,000 horsepower.

The project would be on the north fork and main channel of Kings river.

Fare Called Tax on Workers

AVIGOROUS protest against the proposed raising of streetcar fares from 7 to 10 cents was made last month by Assemblyman Edward F. O'Day on behalf of the people of the 24th assembly district of San Francisco.

"This increase simply amounts to an added tax on the workingmen," O'Day said. "There is absolutely no justification for it. If this matter were submitted to the voters of San Francisco it would be rejected by an overwhelming vote . . ."

O'Day called attention to the OPA's effort to keep down civilian commodity prices and the War Manpower Commission's effort to keep wages at an even keel. He emphasized the increased fare would amount to a further load on the workingmen's families who constantly use the streetcar.

Proposal to raise the fare from 7 to 10 cents was made recently by Supervisor Jesse C. Colman as a method of financing postwar improvements in the local transit system. He said he spoke with approval of the public utilities commission.

New Line Construction

CONSTRUCTION on an additional high-volume power line from Boulder dam to southern California by the Southern California Edison Company, to cost \$4,500,000 would begin immediately, it was announced recently.

The new line, 130 miles in length, will link other existing lines into a main transmission line over the 280 miles between the dam and Los Angeles. To be completed within six or seven months, the power line will carry 220,000 volts' current and will have a capacity of 125,000 kilowatts.

Georgia

Power over Airways Denied

THE state senate recently killed a measure to give the state public service commission regulatory powers over intrastate air commerce, and the house withdrew consideration of a proposal to ban closed shops in Georgia.

Senator Spence Grayson, of Savannah, senate president *pro tem*, and author of the air commerce bill, served notice he would seek reconsideration of the measure which was opposed by Governor Arnall and the air lines.

Failing by 3 votes to receive the requisite senate majority of 27 votes, the defeated bill was a half-page substitute to the original measure of 22 pages. Whereas the first bill designated the regulations to be enforced by the state commission, the substitute merely proposed that all intrastate air commerce "shall be subject to supervision and regulation by the Georgia Public Service Commission in accordance with any and all laws hereafter enacted by the general assembly prescribing regulations therefor."

Kansas

Seek Way to Put Lid on Natural Gas

SEeking a course which will block wholesale pumping of Kansas natural gas to northern and eastern industrial centers and will conserve Hugoton field production for potential domestic industries, Governor Schoeppel and Lieutenant Governor Jess C. Denious conferred last month with Kansas City industrial leaders.

Confronted with the prospects for additional heavy demands on the output from the Hugoton field, a remedy to conserve the production for domestic consumers was discussed. There was no immediate solution offered, although various courses of procedure, including both state and Federal legislation, were studied. The governor said every agency of the state would be made available to meeting the problem. None of the conferees were immediately prepared to state whether new legislation would be sought at this session, al-

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though several tentative proposals were under consideration.

"You may be sure of one thing so long as I am governor," Schoepel declared. "Kansas will never surrender her control over production and distribution of her mineral resources."

A bill designed to strengthen the hand of

the state corporation commission in preventing wasteful use of natural gas was introduced in the state senate last month.

A commission member said that, if the bill becomes law, the commission would be able to prevent wasteful methods of manufacturing carbon black, producing power, or other natural gas uses.

Kentucky

Favor Lower Purchase Price

THE representative of the city of Paducah and R. M. Watt, president of the Kentucky Utilities Company, are more than \$1,000,000 apart in estimates of what the city should pay for the Paducah properties of the company, a letter filed at a meeting of the board of commissioners last month revealed.

L. R. Howson, Chicago engineer retained by the city to negotiate with Watt, reported that Watt proposed a price around \$3,400,000 for the properties if the city takes them "with no strings attached as to the source from which power would subsequently be furnished." He added that Watt offered an alternative under which the distribution system would be purchased by the city and power bought from KU under a 5-year contract.

Howson recommended that the city offer the company \$2,300,000 for the gas and electric systems if it desires to purchase power from the Tennessee Valley Authority or some agency other than the Kentucky Utilities, but that the price be dropped to \$1,975,000 if the city agrees to a contract to buy power from KU.

He said cost of power bought from Kentucky Utilities would be considerably greater than if purchased from TVA and the savings which could be made for consumers would be much smaller.

TVA only recently put in operation the first generator at its huge power, flood-control, and navigation dam at Gilbertsville, only a few miles from Paducah, and several other generators are scheduled for installation at the Tennessee river project.

Louisiana

Gas Proration Program Urged

P. A. FRYE, chairman and executive director of the recently organized Louisiana Natural Gas Conservation Committee, announced last month that pursuant to action taken by his committee he had written Commissioner of Conservation Joseph L. McHugh, requesting that he institute a statewide investigation with a view to considering, among other things, the feasibility of placing in effect in Louisiana a statewide program of gas proration and ratable taking.

In his letter to Commissioner McHugh he

referred to prior correspondence and consultation on the subject, and advised that it was the unanimous view of his committee that the proration and ratable taking of gas constitute one logical approach to the proper conservation of gas.

Colonel Frye explained that ratable production means allocating existing demands for gas among all wells in a given field, including wells not owned by dominating producers. He stated that ratable taking, where it can be accomplished, constitutes a primary requisite to true conservation and should protect the correlative rights of all owners.

Maryland

Power Line Bill Urged

NEITHER the state of Maryland nor any of its political subdivisions at present has any jurisdiction over the construction of high-voltage power lines, the senate finance committee of the state legislature was told recently by a group advocating passage of a bill sub-

jecting erection of such facilities to regulation.

The advocates of the bill, residents of Baltimore county in the Green Spring valley, Ruxton, Riderwood, and Rockland sections, were represented at the hearing by Arthur W. Machen, William Fell Johnson, Walter Buck, Joshua Harvey, Dr. John B. Whitehead, and Dr. Robert W. Johnson, Jr.

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They explained that the pending bill to require commission approval for high-voltage power lines was deemed necessary when a group seeking to prevent construction of a high-tension line down the Fails road from Texas, Baltimore county, to Mount Washington, learned at a meeting with the Baltimore county commissioners last December that the county lacked authority to intervene with the plans of the Consolidated Gas, Electric Light & Power Company of Baltimore.

The group learned also, its spokesman reported, that the state commission, which regulates utilities, had no jurisdiction.

It was then determined by the group, the finance committee was told, that statewide

regulatory legislation should be proposed at Annapolis to afford a measure of protection to communities against encroachment by high-voltage power lines.

The bill, introduced by Senator Joseph R. Byrnes, would require commission approval for the plans and location before the construction of any power line carrying more than 15,000 volts on poles or towers more than 40 feet high.

The commission would be required to give public notice of plans for such construction and hold hearings on the proposal and "consider the effect of such proposed line upon the public health, morals, safety, and general welfare."

Massachusetts

Commissioner Appointed

THOMAS A. FLAHERTY was recently appointed to the state department of public

utilities, succeeding Commissioner George P. Drury. Commissioner Flaherty was named chairman of the department, succeeding Chairman Carroll L. Meins, who remained.

Michigan

Strong Staff Sought

PLANs for aggressive and more thorough supervision of public utilities and their rates were disclosed recently by William J. McBrearty, chairman of the state public service commission, as he sought funds for 33 more examiners, accountants, field investigators, and engineers.

"We need electric, gas, and telephone engineers and other technicians if we are to become an active instead of an inactive body," McBrearty said. "We want to check the original cost and other records of the utilities which we regulate."

Contending that the state commission has had to depend on rate analyses compiled by Detroit or other city officials, the new chairman asserted that the commission itself should have a staff adequate to meet its statutory duties.

"The additional employees will cost only about \$30,000 because much of the work can be charged to the companies we examine," McBrearty said. "I have talked with members of the house ways and means committee, and received what I consider a most receptive audience."

"Unquestionably the commission is understaffed if it is to be a real public service organization. Michigan spends 8 cents on regulation for each \$100 of utility revenue collected, whereas New York spends 36 cents. We have 65 employees while Pennsylvania has 344 and Wisconsin, with fewer companies to regulate, has 108.

"Half of our employees are assigned to the motor transport and are not available for public utility regulation."

McBrearty said the civil service commission had indorsed his expansion program after a survey.

Minnesota

Natural Gas Voted

THE St. Paul city council, by a 4-to-3 vote, last month approved the bitterly disputed natural gas ordinance and set up the machinery for providing straight natural gas with a 1,000 Btu heat value to both domestic and industrial users in St. Paul.

A large group of both proponents and op-

ponents of the measure was in the council chamber when Parranto moved a roll-call vote on it.

George Morgan, counsel for Koppers Coke Company, made a last-minute appeal for a delay until a time when price, the possibility of supply, and War Production Board priorities needed for the conversion equipment will be more certain.

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In the words of M. T. Herreid, vice president and manager of the Koppers Coke plant in St. Paul, the city council has "bought a pig in a poke" by approving introduction of natural gas for domestic and industrial use in the city. He declared that the ordinance approved by the council has four major faults:

1. Natural gas is not now available for general use in St. Paul; the ordinance will not make it available; and no one knows when it will be available.

2. The rate schedule proposed is meaningless because it will expire before natural gas can be obtained, and no one knows what the price of natural gas will be if and when it does become available.

3. The ordinance obligates the people of St. Paul to eventual use of natural gas at prices which will be determined, not by the city council, but by agencies over which the city has no control.

4. The ordinance relieves the gas-supplying company and the local utility (Northern Natural Gas and Northern States Power companies, respectively) of all responsibility for breakdown of service or failure of supply and contains no safeguard for the people.

Koppers Coke has supplied to Northern States Power all manufactured gas distributed in the city, and company officials claim the plant will be closed down as a result of approval of the natural gas ordinance.

Montana

FPC Announces Order

THE Federal Power Commission on February 25th announced its opinion and order requiring the Montana Power Company to make accounting adjustments in the amount of \$51,978,025. The order requires the company to file entries by January 31, 1946, disposing of write-ups and other improper charges to plant accounts in the amount of \$46,891,597. This amount is 80 per cent of the original cost (\$58,023,509) of electric properties as of January 1, 1937. The amount is the largest so far ordered disposed of by the FPC in any accounting case.

The commission found the excess of actual cost over original cost of properties of going concerns acquired in arm's-length transactions to be \$5,086,428. It concluded this amount does not represent payment for tangible properties now in service and ordered the amount amortized over a 15-year period, beginning with 1945.

The opinion stated that the write-ups resulted largely from balancing the plant accounts with the par value of securities issued in less than arm's-length transactions. The commission, therefore, asserted the write-ups should be absorbed by the common stock equity.

Nebraska

Power Decision Reversed

THE Omaha city council was clearly within its rights in appointing a people's power commission and in refusing to submit the question of whether or not a commission should have been appointed to a vote of the electorate, the state supreme court held on February 16th in an unanimous opinion. This was a reversal of the decision of the Douglas County District Court.

At the same time the court said the question of constitutionality of the law under which the power commission was appointed (LB 204) was not properly raised, and sustained the decision of the district court on that point.

The opinion was written by Judge E. B. Chappell.

The court held that LB 204 passed by the 1943 legislature is a complete legislative act of statewide concern and that its primary purpose is to provide a means whereby cities of the metropolitan class can construct or acquire an

electric utility. It said the Omaha city council, in adopting a resolution appointing a people's power commission and instructing it to proceed under LB 204 acted in executive or administrative capacity.

It also said that to have submitted the question to the electorate, as asked for by petitions presented to the city council, would have given the voters authority to invalidate a general legislative eminent domain statute and legislate for and in behalf of the state.

The action was brought by Martin W. Nelson and Edward A. Hofmann against Mayor Dan Butler, the city council, and members of the power commission.

State Senator C. Petrus Peterson was reported on the same day to have taken the lid off the Nebraska Power Company transaction while arguing for repeal of the law creating the Omaha People's Power Commission, and pledged himself to oppose anything that would validate the sale of Nebraska Power Company properties to the Omaha Electric Committee,

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Inc., which was recently organized to take over the company at a negotiated price in excess of \$40,000,000.

Peterson in his opening remarks declared that he did not doubt the integrity and honesty of the Omaha men who formed the Omaha Electric Committee, but that he was not including the Loup River Public Power District in that statement.

"I am not starting on a program of vilification nor an attempt to smear or imply wrongful motives," Peterson stated, "but I do take the position that the men have acted in an ill-advised manner which I am not able to justify or approve as good public policy."

The Omaha city council's recent action canceling the Nebraska Power Company franchise for sale and distribution of electricity within the city of Omaha and placing it on a day-to-day basis "is just another move to delay public ownership," President T. H. Maenner of the company's board of directors said.

A coalition of state senators to prevent a fight over public power from dragging the length of the legislative session was being formed, it was learned last month. It had not reached very large proportions but the "character" members were said to believe that if the session is materially prolonged because of power more support would become available.

Power Bill Amended

An amendment to the bill altering the state's condemnation law has been drafted which meets with the approval of the League of Municipalities, Consumers Public Power District, and the three introducers, Senator John Mekota said recently at the close of a conference attended by representatives of all groups.

The amendment which was approved strikes out all of the new wording in the bill in § 1 which it was contended by opponents could be interpreted to mean that prices paid by Con-

sumers Public Power District for the private properties it purchased were to be used by courts of condemnation in determining the fair and reasonable price municipalities would pay if they should condemn.

To overcome that objection to the bill, LB 92, this amendment was drafted:

"When the sum that is fair and reasonable shall have been determined as above provided, the court shall deduct therefrom and allow as credit upon such sum an amount that bears the same proportion to such sum as the amount of the bonds that have been paid, redeemed, or liquidated, and reserves established therefor by said district, while such city or village was within and a part of such district, bears to the total amount of the bonded indebtedness of such district issued to finance the purchase price or cost of construction of the entire property of such district."

It was contended that the amendment would give municipalities which may condemn credit for the amount of bonds retired by Consumers but would not provide that the amount paid originally by Consumers for properties purchased shall be taken into account for a court of condemnation in arriving at a fair and reasonable price.

Pipe-line Bill Advanced

UNDER provisions of an amendment adopted by the state legislature on February 23rd, natural gas pipe-line companies can be called upon to supply service to residences outside incorporated cities and villages regardless of the distance they are from the pipe line. The original bill provided that such service must be given to residences located within 500 feet of such pipe lines but this restriction was removed upon motion made by Senator Ladd Hubka. The cost of installation, however, must be paid by the consumer. The bill, LB 127, was then advanced to third reading.

New Jersey

FPC Policy Change Asked

ATACKING the Federal Power Commission's order requiring Public Service Corporation of New Jersey to rewrite its plant accounts on an original cost basis as a measure which would restrict the company's ability to raise capital, Thomas N. McCarter, chairman of the board, declared recently that "this destructive policy must be changed."

In his annual statement for 1944, Mr. McCarter said that overlapping of Federal and state regulation, as indicated by the FPC order, had made operations of the company a matter of "great difficulty" during the war.

Gross revenues for 1944 were \$184,643,812, against \$183,624,856 in 1943, and showed the

effects of an electric rate reduction made during the year, as well as the shutdown of the aluminum plant at Burlington, Mr. McCarter declared.

The FPC order referred to requested the company to show cause why it should not be ordered to dispose of \$9,479,956 of a total of \$38,565,513 included in its plant account, to submit plans for eliminating the balance of \$29,085,557, and an additional \$28,328,211.

In pursuing its policy, Mr. McCarter said, the FPC is "paying no attention to either the value of the property under consideration, nor to what the existing companies actually paid for the properties for which securities approved by the state commission have been issued or sold."

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New York

Court Upholds Utility

THE United States Circuit Court of Appeals at New York city, in a 2-to-1 decision, on February 23rd refused to enjoin the Long Island Lighting Company from consummating a plan of recapitalization without referring it to the Securities and Exchange Commission. The court, however, continued a temporary order enjoining such consummation until issuance of the appellate court's mandate, which would

take at least a week and would give the SEC a chance to appeal to the Supreme Court or to ask a rehearing before the circuit court.

Serving communities on Long Island with electric power and gas, the company, it was argued, does an intrastate business, and, under provisions of the Public Utility Holding Company Act of 1935, it was exempted from the registration and regulatory provisions of that act in an order of the SEC dated March 27, 1936.

North Dakota

Cost Rate Base Law Passed

THE North Dakota legislature passed by a vote of 43 to 4 in the senate and 103 to 2 in the house of representatives a law which established the prudent investment method for valuing utility property for rate making. The

new law, which was signed February 23rd by Governor Aandahl, repeals former provisions of the North Dakota Code which the state supreme court had held in a recent public utility rate case to require a determination of reproduction cost in fixing reasonable rates, it was reported.

Oregon

Power Tax Boost Defeated

THE state house utilities committee brought out a unanimous "do not pass" report recently on a measure by Representative W. W. Baldersee, Grants Pass, which would have increased the tax on municipal power systems from 3 per cent to 9 per cent.

If the house adopts the committee report the measure will be postponed indefinitely. Under its provisions, the municipal power systems of Eugene, McMinnville, Ashland, Monmouth, and Canby would have apportioned 9 per cent of their gross revenues among the counties,

school districts, and cities of the area. The 3 per cent tax now in effect goes entirely to the city government.

The bill, changing a law enacted by the 1943 legislature to tax such utilities, has the backing of the League of Oregon Counties, whose attorney, W. S. Fort, told the committee that if it is proper for cities to share in revenues of such utilities it is equally proper for counties and school districts to have a part. Fort pointed out that the legislature has several times asked Congress to provide reimbursement for revenues lost as a result of Bonneville properties being taken from tax rolls.

Pennsylvania

Bill Would Tax Utility Gross

A 3 per cent tax on gross receipts of public utilities, in place of taxation of now tax-exempt real estate of utilities, was introduced in the state senate last month by Senator Elmer G. Holland, Democrat of Pittsburgh.

Senator Holland estimated his proposed tax would develop about \$9,000,000 a year in revenues, to be distributed to counties, municipalities, and school districts according to population. In Allegheny county, he estimated the total revenues available for distribution would be \$2,500,000 a year. Under the law it would be collected by the county treasurer and distrib-

uted one-third to the county, one-third to municipalities, and one-third to school districts.

Rehearing Denied

THE state public utility commission has denied the petition of the Elizabethtown Water Company for a rehearing and rescission or modification of the commission's rate order of last December, it was announced recently.

The company contended that the order deprived the company of its property without due process of law and its petition averred the commission had erred in various findings set forth in the order.

South Carolina

Votes to Buy Utility

ALTHOUGH their community has an assessed property valuation of slightly less than \$200,000, citizens of West Columbia have voted their agreement to the town's purchase of the properties of the South Carolina Electric & Gas Company for an estimated price of \$39,500,000.

The vote came on the heels of an unsuccessful effort on the part of the Columbia city

council to make the purchase. Mayor W. H. Price was unable to say whether a contract for acquirement of the utility properties would be sought.

A state law limits the amount of bonds any municipality can issue to 8 per cent of its assessed property valuation.

However, in the proposed purchase by Columbia, revenues from the power properties, rather than city credit, would have been pledged in support of bonds.

Texas

Gas Conservation Bill Proposed

REPRESENTATIVE F. G. Swanson, Tyler, last month said he would introduce a bill, prepared after consultation with members of the state railroad commission, as a stronger natural gas conservation measure.

Swanson said his bill would provide for ratable taking of gas from a reservoir; strengthen the commission's authority to enforce pressure maintenance orders; and require gas pipe lines to gather casinghead gas produced with oil before drawing upon natural gas reserves, where it is reasonable to do so. The bill provides in part:

"It shall be the duty of the commission, after notice and hearing, to ascertain and determine the reasonable market demand for gas to be used for light and fuel purposes and for

all lawful purposes to which sweet gas may be put under the terms of this article, and by proper order to restrict the production of gas and prorate same in various fields in this state to an amount equal to the reasonable market demand therefor.

"Gas produced with oil and reasonably accessible to market shall be given first consideration by the commission in determining the reasonable market demand for gas. In such order the commission shall allocate, distribute, or apportion, ratably, the total allowable production of gas from gas wells among the various gas wells affected by the order on a reasonable basis.

"It shall likewise be the duty of the commission to prorate ratably the daily gas well production of sour gas produced from each common reservoir of sour gas in this state."

Washington

PUD Trial Due

CONDEMNATION proceedings against the distribution facilities of the Portland General Electric Company, which have been brought by the Clark County Public Utility District, will be tried in Tacoma, Judge Charles W. Hall of the Clark County Superior Court announced last month in an order changing venue, according to the motion of attorneys for the PGE. The order was issued following a special hearing on the motion, during which arguments by attorneys for both the utility district and the electric company were heard.

A bond of \$1,000 had been posted previously to cover the cost of the transfer should the district court decide against the transfer, which was made following defendant's argument that parties to the suit were legal residents of different states. Electric company attorneys pointed out that a list of the stockholders included the Chase National Bank of New York

city; Marine Midland Trust Company of New York; and the Bankers Trust Company, New York, as well as the Harris Trust & Savings Bank, Illinois.

Condemnation proceedings against the distribution facilities of two other private utilities are contemplated, PUD attorneys have stated, naming the Pacific Power & Light Company and the Northwestern Electric Company.

District Enjoined

THE Okanogan County Public Utility District was enjoined temporarily last month by the state supreme court from consummating sale of \$2,000,000 in bonds in connection with its condemnation of water power properties in that county.

The court ruled in favor of the Washington Water Power Company in a 5-to-2 decision. Hearing of the case on its merits was set for March 30th.

The Latest Utility Rulings

Federal Court Lacks Power to Distribute Impounded Funds to Ultimate Consumers



A JUDGMENT of the United States Circuit Court of Appeals for the Seventh Circuit, denying an application by Central States Electric Company for payment of an impounded fund and directing its payment to municipal officials, was reversed by the Supreme Court. The circuit court, it was held, lacks jurisdiction to adjudicate the question of the rights of ultimate consumers where funds have been impounded during litigation over a rate reduction order of the Federal Power Commission.

The commission had ordered the Natural Gas Pipeline Company of America to cut its rates on natural gas. This order was upheld by the Supreme Court [315 US 575, 42 PUR(NS) 129]. When the order was sustained, Pipeline became liable to make refunds. The circuit court held that it had the power and duty to take exclusive control over refunds and to determine the rights of all claimants in the fund [45 PUR(NS) 469]. Further proceedings relating to disposition of these refunds were conducted in the Federal court, but Central States Electric Company, a wholesale customer of Natural Gas Pipeline Company, was not a party [47 PUR(NS) 464; 50 PUR(NS) 430].

Central States filed a petition setting forth that it purchased gas from Pipeline during the refund period pursuant to a contract and set forth grounds on which it claimed a refund. The lower court, however, directed that the refund be paid to municipal officials purporting to represent consumers in Iowa.

The court below was right, said the Supreme Court, in its view that it had no power, at least in the absence of Federal legislation, to fix or adjust Central's

rates, that being a legislative function of the state of Iowa. The court below had no power as a court of equity to fix rates, and as a Federal court it had no power to adjudicate a matter within the legislative competence of Iowa. Mr. Justice Roberts, delivering the opinion of the court, said:

The Natural Gas Act clearly discloses that, though its purpose may have been to protect the ultimate consumer at retail, the means adopted was limited to the regulation of sales in interstate commerce at wholesale, leaving to the states the function of regulating the intrastate distribution and sale of the commodity. That Congress intended to leave intrastate transactions to state regulation is clear, not only from the language of the act, but from the exceptionally explicit legislative record, and from this court's decisions. . . .

We are of opinion that the court below lacked jurisdiction to adjudicate the question of the consumers' rights in the fund in dispute.

The ultimate consumers' rights being such as the law of Iowa affords, the court continued, there was no reason for the payment of the fund to municipalities or municipal officers under a quasi trust for those found ultimately entitled, thus placing the burden on Central to pursue the cities or their officers for its recovery. An order to this effect, it was said, was not within the court's jurisdiction. The most the court below should do, in view of the apparent controversy as to the consumers' rights to a refund, was to order that the fund be held for a reasonable time to permit interested parties to litigate the issue in a tribunal which would have the jurisdiction.

Justices Black, Murphy, Rutledge, and Douglas dissented. They were of the opinion that the Federal court should grant to consumers relief for injury suf-

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ferred as a result of the Federal court action in granting a stay of the commis-

sion order. *Central States Electric Co. v. City of Muscatine et al.*



Curb on Service by Coöperative under Bargain Rates

THE Oklahoma commission espouses the principle that for the purpose of encouraging development of rural electrification a utility may establish a lower rate level for service to rural coöperatives than that tendered other users. It recognizes, however, that proper qualifications and restrictions should be placed upon this cheaper service to avoid unreasonable discrimination. Therefore the commission, in revising electric rate schedules for service to coöperatives, has limited the type of service available under rate concessions.

The Oklahoma Gas & Electric Company in 1941 established low rates available to coöperatives for service in rural areas for resale and distribution solely to members as ultimate users. Last year it proposed that the reduced rates be made applicable to ultimate farm users in an unrestricted manner and to nonfarm users in rural areas with certain restrictions. The proposed restrictions would prevent the application of the rate in the billing of energy purchased by coöperatives for nonfarm users requiring transformer capacity in excess of 30-kilovolt amperes and in communities having a population in excess of 250.

The commission accepted a compromise plan, proposed by its staff and acquiesced in by the company, under which reduced rates would be available for the purchase of energy to be distributed in rural areas to the following classes of users: (1) general farm use, farm residences, rural residences, dairy farms, churches, public schools, and community houses; (2) filling stations, country stores, grist mills, elevators, cheese factories, etc., provided any individual user does not require in excess of 30-kilovolt amperes of transformer capacity; (3) for use in small towns and villages, provided the energy required by any indi-

vidual using in excess of 30-kilovolt amperes of individual transformer capacity shall be billed to the coöperative under the standard resale rate schedule.

Company representatives urged the necessity for a limitation because the coöperatives had departed from their original purpose of supplying electricity only to farmers and other small users in unserved rural areas. They were going into the business of serving large power loads and communities of substantial size already receiving service. The commission strongly favored rates to coöperatives for rural purposes as low as they can possibly be "short of placing unreasonable burdens on other customers of the company."

The problem of bringing electric service to rural areas [said the commission] is one of the most important which this state faces. Even small urban areas have had electric service for many years. During the last fifteen years electric service has been extended into the more densely populated rural areas but there remain large sparsely settled areas where there is still no electric service . . . Ordinary interest rates, taxes, and normal costs of doing business have precluded wide developments of rural areas by private enterprise. It was to reduce these obstructions that the initial rural electrification acts were passed by Congress and supplemented by enabling legislation in the states. The rural electric coöperative corporations were clothed with certain powers, privileges, and immunities by means of which the cost of bringing electricity to the farmer was greatly reduced. . . .

Consideration has been given to the contention of a witness for the coöperatives that the requirement of the application of the company's standard resale schedule for service purchased for certain types of loads would restrict the development of the coöperatives. This schedule, it has been pointed out, is used by all distributing agencies except rural coöperatives for all energy purchased for resale purposes. These other agencies conduct their business apparently with success even though they, in many instances, do not enjoy the advantages given to the coöperatives in low interest rates, low taxes,

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and other preferential treatment. It seems fairly clear therefore that, with their other advantages, the cooperatives can operate profitably on an equal footing with other distributing agencies in so far as cost of

power for customers not entitled to this rate is concerned.

Re Oklahoma Gas & Electric Co. (Cause No. 18422, Order No. 17399).



Housing Authority Not Entitled to Rate Concession As Municipality

HOUSING authorities created under the general statutes of the state of Connecticut, receiving telephone service from the Southern New England Telephone Company, according to a decision of the state commission, are not entitled to rate reductions under the tariff on file with the commission and presently in force. The tariff granting rate concessions to municipalities reads as follows:

Municipal rates as specified above are allowed only where the service is paid for by the state, county, or municipal government, public school district, parochial school, or volunteer fire department without reimbursement from the individual in whose office the service is furnished.

The commission described the activities of the housing authorities, the basis for their operations, and rulings in other states on the question whether housing authorities are "municipal corporations" or "public corporations functioning as political subdivisions of the state." This narrowed down the issue to the question whether the availability clause included such customers.

The commission stated the principle that tariff provisions creating a reduc-

tion in rates are to be strictly construed because such a practice approaches the border ground of discrimination between customers. Any rate differential not justified from the standpoint of collecting from customers charged with the particular rate the cost incurred in giving service may impose an additional burden on customers who do not enjoy the preferred or lower rate. The commission added:

While the language of § 4 is somewhat difficult to understand with respect to its application to public corporations, viewed from the aspect of discrimination, as just discussed, its meaning appears clear. The cost of telephone service used by the housing authority is not "the service . . . paid for by . . . the state, county, or municipal government . . . without reimbursement . . ." In short, there is no burden imposed upon the taxpayer as a result of telephone service supplied to a housing authority. It seems quite clear, therefore, that housing authorities, regarded either as municipal corporations or public corporations functioning as political subdivisions of the state, are not such corporations within the meaning of the availability clause in the tariff of the Southern New England Telephone Company, quoted above.

Re Southern New England Telephone Co. (Docket No. 7557).



Extensions Financed by Customers Excluded From Rate Base

THE California commission, employing a discount form of rate reduction, made no final pronouncement on all differences that had been developed in proceedings leading to an interim opinion and order. The commission did, however, rule that extensions financed by customers' advances not subject to refund in full should be excluded from the rate base. The unrefunded advances were

transferred to the donations account.

The utility contended that on many of these extensions gas sales had increased so that the extensions no longer constituted a burden to other users of gas. The company claimed that it was entitled to a return on all such extensions. The commission, however, said that if earnings had increased on this class of extension, there was additional reason for excluding

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them from the rate base. Otherwise, consumers would be required to pay a return on capital amounts advanced by themselves. In developing the base the commission included in the allowance for cash working capital actual amounts available for working cash resulting from tax accruals ahead of payments.

Commissioner Rowell, in a dissenting opinion, said it was impossible to say whether some reduction in rates might be justified as the decision did not contain an adequate statement of those facts essential to a determination of what may constitute just and reasonable rates now

or in the future. He said that the commission was proceeding to translate into a rate reduction a large part of income taxes which the company was paying to the Federal government. Commissioner Craemer, dissenting, said that he had not been afforded the opportunity of a full discussion of the underlying facts in support of the majority opinion and order as drafted, at a duly called meeting of the commission. He agreed with Commissioner Rowell's views regarding the treatment of taxes. *Re Southern Counties Gas Co. of California* (Decision No. 37521, Case No. 4716).



Accounting Revisions by New York Commission Upheld by Court

ORDERS of the New York commission directing the Pavilion Natural Gas Company to make certain journal entries on its books of account were upheld by the appellate division of the New York Supreme Court. The court could not say that the decision of the commission was arbitrary or without evidential support.

The company had acquired from the affiliated Pittsburgh Gas & Oil Company, in 1915, physical property costing only \$38,247.89. The property was entered on the purchaser's books at \$200,000. This, the court said, resulted in a write-up of \$161,752.11. The commission had directed that the sum of \$93,016.80 be written off by charging the same to earned surplus. A part had been written off by accruals to depreciation reserve.

The company had obtained authority from the commission, in 1922, to construct a gas transmission line under the terms of an agreement with another company, and there was evidence that the application was made under pressure from a member of the commission. The venture turned out to be improvident, but these facts, said the court, could not be held to affect proper accounting methods.

The company was to construct the line and hold title until 50 per cent of the cost had been paid by the other company in the form of rebates on gas purchased.

The gas supply failed in 1925 before title had been transferred. Part of the cost was salvaged, but the utility sustained a loss of more than \$27,000. It had charged this loss off by debits to retirement reserve in the years 1930 and 1931.

This charge to retirement reserve was held by the commission to be improper on the ground that the entire transaction had nothing whatever to do with such reserve. The court upheld the commission's views, and the loss was required to be charged to surplus. It was said that the reserve for depreciation is not an odd lot corner to which every loss may be thrown, irrespective of its source, but a reserve set up solely for the purpose of providing for depreciation of physical plant.

The commission's action, in excluding from property cost a construction fee paid to an affiliate, was also upheld. The company had not shown that the fee was reasonably necessary and proper.

A transfer of part of retirement reserve to surplus was reversed since the company had not obtained authority from the commission for this transaction. The court would not go into the question whether the commission should now exercise its discretion in approving the transaction as of the date when it was made. *Pavilion Natural Gas Co. v. Maltbie et al.*

THE LATEST UTILITY RULINGS

Commission Findings Supported by Substantial Evidence Must Be Upheld

THE first ruling on the division of power between the Wisconsin commission and the courts of that state under the Uniform Administrative Procedure Act of 1943 resulted in affirmance of a commission order because the determination was not "unsupported by substantial evidence." Judge Reis of the Dane County Circuit Court reviewed the rulings on conclusiveness of commission decisions prior to enactment of the 1943 statute and compared the rulings under the Industrial Commission law. Findings of that commission, he said, are to be sustained unless supported by "credible" evidence.

The commission had denied authority to Schneider Transport & Storage, Inc., to act as contract carrier for Manitowoc Shipbuilding Company. Judge Reis indicated that he might have reached a different conclusion on the evidence and said that if the commission decision had been the other way the court would have affirmed it with equal, if not greater, alacrity. Under earlier statutes the commission's order was merely "prima facie reasonable," and under the Public Utilities Law the commission's determination

might be upset by "clear and satisfactory evidence." The new statute, however, provides that the court may not reverse unless findings are unsupported by "substantial" evidence.

Judge Reis said:

We cannot avoid the conclusion that the terms "credible" and "substantial" are now being used interchangeably. And this must be true, if "substantial" is a "requirement," of the Federal rule, and if the evidence must be substantial . . .

We believe that there is more record evidence against the commission's position than for it. We cannot be governed, however, by the greater quantity of evidence, so long as "substantial" evidence exists to back up the commission's conclusion. . . .

This is a case of "Our commission, may she always be right, but—right or wrong—our commission."

Schneider Transport & Storage, Inc. et al. v. Wisconsin Public Service Commission.

Subsequently the court reversed orders of the commission in another case on the ground that the commission "did not cite one scratch of evidence." The commission had denied an application for a direct trucking route because it was not shown to be "in the public interest."



Police Action Not Sufficient Basis for Denying Telephone Service

AN order was granted by a New York court compelling restoration of telephone service to a subscriber who had been found not guilty of bookmaking, although he was described as an ardent bettor on horse races, using his telephone frequently for placing wagers with bookmakers.

The police, without a search warrant, had forcibly entered his apartment and removed the telephone instrument.

Following acquittal the subscriber demanded restoration of service. The company referred the matter to the police department in accordance with an understanding or arrangement to the effect that whenever a subscriber's service is inter-

rupted by the police, or whenever the police request termination of service upon an alleged violation of law, the company will terminate service and not restore it, until the police department has given approval. The police department did not approve restoration, and restoration was refused by the company. The court said:

It seems clear to me that the company's refusal to restore the service for the reason stated constitutes no defense to this proceeding, and that petitioner is entitled to an order of mandamus compelling the restoration of the telephone service.

Coöperation between the police department and the telephone company to combat crime is a commendable arrangement, but however laudable the object and purpose they may not

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interfere with and cannot be permitted to interfere with or destroy the legal rights of telephone subscribers; nor can any such arrangement override the statutes relating to that subject; these laws are superior to any agreement or arrangement which the police department and the telephone company may enter into.

A telephone company, the court continued, may not refuse services because of mere suspicion or mere belief that they may be or are being used for an illegitimate end. Neither the police commissioner nor the police department, it was pointed out, has any jurisdiction or authority over the matter of furnishing service. Approval or disapproval is meaningless in so far as any legal effect is concerned.

Commenting on a point made by the company that it should not be required to assume the burden of deciding whether or not it should comply with a police request, the court did not see that the company should be put on a plane different

from that of any person who is confronted with a problem. It must solve it as best it can.

As to a contention that the residence telephone was used "as a conduit for enabling the crime of bookmaking to be committed," the court said that at common law bookmaking was not a crime. It had been made a crime by statute, and it was only against the professional gambler that the statute was directed and not against the bettor.

Although the court granted a mandamus order against the company, it dismissed the proceeding as to the police commissioner, who was also made a party to the proceeding. It was said that mandamus is a remedy which may be invoked to compel a public officer to do an act or discharge a duty specifically required of him by law to be performed. Where no duty or obligation rests upon him, mandamus may not be employed as a remedy. *Re Shillitani (Valentine)*.



Other Important Rulings

THE California commission held that a showing that an express corporation, prior to the critical date for establishment of a prescriptive right, had engaged in extensive investigations and negotiations leading to agreements with underlying carriers, had filed a tariff with the commission, and had conducted substantial transportation services between representative points within the territory was sufficient to establish a prescriptive right to serve such territory, since it is not essential that a carrier embarking in business should serve at the outset all the points named in his tariff, as this would be so exacting a rule as to ignore the normal growth of business. *Re Coast Line Express et al. (Decision No. 37475, Application No. 24366, Case No. 4601)*.

Attorneys for individual stockholders opposing a plan filed by a holding company and its subsidiary under § 11(e) of

the Holding Company Act to effectuate compliance with § 11(b) of the act are not entitled to receive any fee or reimbursement for expenses from the holding company or its subsidiary, where the attorneys represented individual security holders rather than a class of investors, and where their services were not shown to have materially contributed to the development of the plan, the progress of the proceedings, or the welfare of the estate, ruled the SEC. *Re Columbia Gas & Electric Corp. et al. (File Nos. 54-56, 59-33, 70-263, 70-371, 70-387, 70-430, 70-431, Release No. 5460)*.

The New York commission denied approval of the transfer of a portion of an operating certificate where it was shown that the transferee had flagrantly violated the statute by long-continued operations without authority. *Re Coveney & Evans, Inc. (Case MT-2699)*.

NOTE.—The cases above referred to, where decided by courts or regulatory commissions, will be published in full or abstracted in *Public Utilities Reports*.

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Public Utilities Reports

COMPRISING THE DECISIONS, ORDERS, AND
RECOMMENDATIONS OF COURTS AND COMMISSIONS



VOLUME 57 PUR(NS)

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PUBLIC UTILITIES REPORTS

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Robert Pfeifle, Mayor, City of Bethlehem

v.

Pennsylvania Power & Light Company

Complaint Docket No. 9556

Pennsylvania Public Utility Commission

v.

Pennsylvania Power & Light Company

Complaint Docket No. 10867

January 3, 1945

INVESTIGATION of electric, gas, and steam-heating rates; rates in effect held not to be unjust, unreasonable, or productive of excessive return. For decision relating to temporary rate reduction, see (1938) 27 PUR(NS) 174.

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(BUCHANAN and MORGAL, Commissioners, dissent.)

By the COMMISSION: Pennsylvania Power & Light Company (hereafter called the "company" or "respondent") is a public utility formed June 4, 1920, and has its principal office at Allentown, Pennsylvania. It furnishes electric service to approximately 424,900 consumers in 28 counties of central and eastern Pennsylvania; and in various communities scattered through its electric territory, it also serves 63,700 consumers with manufactured gas and 1,360 with steam heat.

On March 17, 1933, the mayor of the city of Bethlehem brought a rate complaint against the company, and on August 1, 1935, the Public Service Commission (predecessor of this Com-

mission) instituted another rate case against the company on its own motion. On April 20, 1936, the two cases, involving similar issues, were consolidated for purposes of hearing and determination.

The history of these cases has had two phases. The first phase, which began with the dates of institution of the two cases and carried through various hearings, ended on December 5, 1938, 27 PUR(NS) 174, when the Commission, by order, directed the company to establish temporary rates providing for reductions in the company's electric revenues of approximately \$2,300,000 annually. The temporary character of these rates arose from the fact that the company had not

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completed an inventory and valuation of its property, and it was expected that when completion had been attained, further hearings and a further order would be required. This phase of the cases involved only 684 pages of testimony and 81 exhibits containing 2,010 pages.

Early in 1941, the company submitted its valuation estimates, and hearings upon the second phase began April 23, 1941, and ended July 28, 1943. The record of the second phase is much larger than the first, and consists of 5,480 pages of testimony and 305 exhibits containing 32,902 pages. This order is issued to dispose finally of the rate cases.

It is unnecessary for us to review certain of the testimony and exhibits of this record, for the reason that they have been superseded by later information. For example, while there are in the record exhibits showing reproduction cost at December 31, 1940, 1941, 1942, and (based on anticipated conditions) 1943, we will review only the exhibits which support the reproduction cost at December 31, 1942, as that date is the latest for which a finding can be made from the record for each of the elements of value and for operating expenses.

[1] Certain other evidence, developed upon the record, will be disregarded, for other reasons. For example, while the record contains a great deal of evidence upon the subject of invested capital of the company, this evidence will be disregarded by reason of the opinion of the Pennsylvania superior court in *Peoples Nat. Gas Co. v. Public Utility Commission* (1943) 153 Pa Super Ct 475, 51 PUR(NS) 129, 136, 137, 34 57 PUR(NS)

A(2d) 375. In that opinion the court said: "Even the severest critics of the present value doctrine conceded that capitalization is ordinarily no evidence of value," and then went on to say that the utility "is entitled to earn on the basis of the fair value of the property presently dedicated to public use."

The discussion which ensues will take up the various matters we have considered in the following order:

- I. The elements of fair value of electric property
 - A. Reproduction cost
 - B. Cost to company
 - C. Historical cost
 - D. Accrued depreciation
 - E. Going concern value
 - F. Working capital
 - G. Fair value of electric property
- II. The fair value of gas and steam properties
 - A. Reproduction cost
 - B. Cost to company
 - C. Historical cost
 - D. Accrued depreciation
 - E. Going concern value
 - F. Working capital
 - G. Fair value of gas and steam properties
- III. Rate of return
- IV. Revenues and expenses
 - A. Electric
 - B. Gas and steam
- V. Findings and order

I. The Elements of Fair Value of Electric Property

A. Reproduction Cost

[2, 3] The company has submitted, as Exhibit 330, an "Appraisal of Property at December 31, 1942, on Basis of Reproduction Cost New as of

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December 31, 1940," which shows the following figures:

Physical property and intangibles other than below	\$220,513,180
Less:	
Miscellaneous nonuseful structures (T2230)	140,204
	<hr/>
	\$220,372,976
Working capital	4,722,105
Materials and supplies	4,135,479
Cost of financing	7,397,207
Going concern value	24,000,000
	<hr/>
Reproduction cost—Electric	\$260,627,767

Working capital and materials and supplies are items to be added to the property rate base, and will be discussed in section I-F. Going concern value, under the opinions of the Pennsylvania superior court, must be considered in arriving at a rate base, but no separate allowance need be made therefor. We will discuss going concern value under its own heading in section I-E. In this section A, we will discuss the physical property and intangibles, including cost of financing, aggregating \$227,770,183.

[4, 5] The cost of financing of \$7,397,207 was explained by witness Carhart. He assumed that the property, if reconstructed now, would be financed by debt, preferred stock, and common stock, in the same proportions in which these securities appear in the company's capital structure. He testified that the actual experience of the company in 1939, when its present debt was issued, is a fair measure of what might be expected if the property were being financed today, and that the cost of financing that debt was 2.308 per cent. He estimated that the cost of issuing the preferred stock would be 4 per cent and that similar costs applicable to common stock would be 8 per cent, based upon reports of

the Securities and Exchange Commission and the recent experience of certain utilities.

In *Solar Electric Co. v. Public Utility Commission* (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 299, 9 A(2d) 447, the superior court said:

"We cannot agree with the contention of respondent that it is entitled to capitalize the expense of marketing the stock of the company. It would confuse rather than simplify the process of rate making to treat the expense of marketing the common stock of the utility as cost of financing. That subject may better be considered under a different head. . . . We are of the opinion, therefore, as we have before indicated, that the cost of marketing the stock of the company is not a matter for capitalization as part of the rate base. The utility is compensated for the capital furnished by it in the fair return allowed."

The same court, in *Cheltenham & A. Sewerage Co. v. Public Service Commission* (1936) 122 Pa Super Ct 252, 15 PUR(NS) 99, 107, 186 Atl 149, said:

"We are therefore of the opinion that in a rate case brokerage fees as such should be confined strictly to such fees as have been or would be paid to a broker for selling the bonds, debentures or *like* securities, which have a *lien* preferred to the common stock." (*Italics ours.*)

It is clear from these decisions that the cost of financing of common stock, at least, is not allowable as an element of rate base, but as neither of them involved a utility financed in part with preferred stock, they do not furnish us directly with a guide as to the treatment of financing costs applicable to

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that type of security. Our approach to the question, therefore, is to determine whether the characteristics of the preferred stock coincide more closely with those of common stock or those of indebtedness, and to decide the issue according to their resemblance. The company's preferred stock does resemble indebtedness upon two points: first, the dividend rates upon it, and its share in the assets, are limited to specific amounts; and second, such dividends and asset-sharing precede the common stock in priority. The holders of preferred stock do have a claim in the nature of a lien on the assets of the corporation in preference to the holders of the common stock, and they do not participate in the profits in excess of the stipulated rate of return. We conclude, therefore, that the characteristics of the preferred stock are more nearly those of a "bond, indenture, or like security" than of common stock, and consequently that the cost of financing applicable to it should be allowed.

The company's common stock constituted 9.25 per cent of its total outstanding securities at December 31, 1942, and this ratio, applied to the \$220,372,976 figure shown in the above table, produces \$20,384,500 as the amount of reproduction cost which would be financed through the issuance of common stock. Using witness Carhart's 8 per cent factor, produces \$1,630,760 as the cost of financing applicable to common stock which we disallow. We therefore find that the allowable cost of financing in respondent's reproduction cost estimate is \$5,766,447.

In the preparation of respondent's reproduction estimate, only one price

quotation was secured for each item of property, eliminating the competitive element. The prices actually paid by respondent for similar items were not considered. Freight rates on poles, for example, were 45 cents per hundred pounds, while the actual average cost was 36.8 cents. Labor rates were not those actually paid by general contractors in the territory for projects of similar scope but were based on data obtained from the United States Department of Labor, The Builders' Association (Chicago), Pennsylvania Department of Labor and Industry, and business agents of various trade unions. Labor performance rates, to which labor costs were applied, were determined by a study of installation costs of only a small portion of respondent's property. For example, 11,542 poles, of a total inventory of 301,511, or 3.8 per cent, were studied, and the number of poles selected for each operating division was disproportionate to the total number in that division. The company, in computing units of labor performance, indirect field costs and general overhead construction costs, studied expenditure requisitions, 95 per cent of the work of which had been done by Phoenix Utility Company, an affiliated engineering concern, although 70 per cent of the work done for the company by Phoenix was of a nature materially different from the wholesale construction which would be involved in the reproduction of the property. Moreover, respondent did not audit Phoenix's costs, but accepted them at face value. The construction overheads applied by respondent, approximating 39 per cent of the physical costs in the reproduction estimate, apparent-

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ly are not related to the actual experience of the company. Numerous other defects could be cited.

All of these defects are noted, lest they be considered to establish a precedent as to what the Commission considers acceptable evidence in other cases.

Respondent's reproduction cost estimate at December 31, 1942, including cost of financing as adjusted by us, totals \$226,139,423.

The material, labor, and overhead estimates included in the reproduction cost study were first made as of December 31, 1937. Then, through the application of price trend data developed by Carhart's firm (Jackson & Moreland), the figures were adjusted to show reproduction cost at December 31, 1940. The figures were then still further adjusted for net additions for 1941 and 1942, to reflect the December, 1942, status.

It is to be noted that the estimates are thus based upon spot prices at December 31, 1940. The Pennsylvania superior court, in the Peoples Natural Gas Case (*supra*), held that "fair value" must be the rate base under Pennsylvania Law and that "a detailed list of the elements constituting fair value, was carried over from the Public Service Act of 1913." (51 PUR(NS) at p. 138.)

[6] Reference to Art V, § 20 of The Public Service Company Law reveals that "reproduction cost, based upon the fair average prices of materials, property, and labor" is one of the elements of fair value. Since reproduction cost is given an important place in valuation by the court decisions, it has become advisable to examine the meaning of the term in Pennsylvania

Law. Also, since the court states that the meaning of the term at the time the act was passed is controlling, our research must be directed to determine that meaning. As a matter of information, the Commission has analyzed the rate cases decided by its predecessor in the first ten years of that predecessor's existence, which years comprehended a period when reproduction cost was always important, and very often the sole rate base element. The results of that study show that in every case where the basis of reproduction cost estimate appears, that basis is a 5-year average, a 10-year average or a 20-year average, with the occasional addition of a one-year average or a spot price estimate. In 59 cases, a 5-year average was used and in 32 cases a 10-year average was used. The combined 91 cases constitute almost all those decided in that period.

A spot price, it is to be noted, reflects the condition of the market at a single instant of time, and gives full weight to any abnormal economic factor which may be operative at the particular moment of pricing. An average price, on the other hand, by having as its bases the prices charged over a number of years, irons out the short fluctuations of recent price history and thereby provides a better foundation for forecasts. Some idea of this difference may be gained from a part of the public utility construction cost index compiled by Francis S. Haberly, to which Carhart refers in Exhibit 134 (1913 prices-100):

Year	Cost Index
1921	195
1922	173
1923	188
1924	187
1925	184

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Year	Cost Index
1926	183
1927	178
1928	178
1929	181
1930	176
1931	165
1932	152
1933	157
1934	172
1935	174
1936	176
1937	197
1938	198
1939	196
1940	200

It is very easy to identify from this table the economic abnormalities of the last two decades. The swift change in price levels from 1921 to 1923 accurately reflects the minor depression and recovery of that period. From 1923 through 1930, prices did not vary more than five points from year to year, but the drop from 1930 to 1932 totaled twenty-four points, and the depression remained very noticeable to the end of 1933. For 1934 to 1936, prices were again stable, but the gain of 1937 over the preceding year was twenty-one points, or nearly as much as the drop in the depression years. It is apparent from this table, as well as from common knowledge of current conditions, that the present price phase is as abnormal as were the depression years. The table itself shows that the average price index of the past twenty years, exclusive of the abnormal ones noted above, approximated 180, or roughly 10 per cent less than the 1940 index.

If this percentage were applied to respondent's spot price reproduction estimate to obtain an estimate based on average prices, the resultant reproduction cost would be \$203,525,481.

B. Cost to Company

[7] Respondent submitted as Exhibit 139 an "Appraisal of Property As of December 31, 1937, on Basis of Cost to Company," which was brought down to December 31, 1942, in its Exhibit 332. The amount shown for electric property at the latter date, exclusive of working capital, cost of financing, "going concern value added by P. P. & L. Co.," and accrued depreciation, is \$204,678,953.

Although the exhibit purports to show cost to respondent, that is, its actual outlay, the accompanying testimony of Carhart shows the true composition of the figures. Excerpts from that testimony follow (Italics ours):

1. "The *cost of the property acquired* by the company throughout the years and still in existence at December 31, 1937, *reflects the cost to construct new as of the various dates of acquisition*, thereby including any enhancement in structural value of the physical property as contrasted with its original cost at the date of construction."

It thus appears that about half of respondent's property, acquired from predecessors, is *not* stated at the cost to respondent, but at the reproduction cost at date of acquisition.

2. "The amount shown for total property . . . amounting to \$22,883,960 includes . . . \$12,483,586 representing the cost incurred by Pennsylvania Power & Light Company for the *opportunity to create the present integrated and interconnected electric power system* and the coördinating of the gas and steam-heating businesses of the acquired companies with the present integrated and interconnected electric power system of the company, together with \$10,000,000 for *going-concern value* acquired from

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predecessor companies and paid for by Pennsylvania Power & Light Company. Also included in this total amount is an amount of \$400,374 for the determined cost of the leasehold of the Lehigh Distribution System" (Note: The Lehigh leasehold terminated May 1, 1943.)

3. "The amounts shown . . . are composed of two items:

"1. The amount of general office administration expense *estimated as the actual cost* of this element in the property constructed by Pennsylvania Power & Light Company, per se, together with interest during construction thereon, *which amount is in excess of the amounts actually appearing on the books and records of the company.*'

4. "*Material and equipment prices as of the dates of acquisition were obtained . . . through quotations from the various manufacturers and dealers in the same manner as has been previously explained with respect to the reproduction cost new appraisal. The labor rates used were based upon a complete and comprehensive study of the labor rates current at the various dates of acquisition and covered a study of the Pennsylvania Power & Light Company payrolls, data from predecessor company's records, and various outside sources such as the U. S. Department of Labor.*"

Carhart did not identify the amounts by which the reproduction costs at dates of acquisition (excerpts 1 and 4) vary from actual cost to respondent, and consequently true cost to company cannot be determined.

There are other points concerning this exhibit, however, which should be noted. Commission witness Barclay prepared Exhibit 237, showing the

corporate and financial development of respondent from its inception on June 4, 1920, to December 31, 1941. That exhibit shows clearly that the interests which formed respondent, and which continue to control it today, have again and again bought properties at arm's length for one price, sold them at less-than-arm's length to respondent for a higher price, and pocketed the difference.

Thus, at its formation, respondent was required to pay \$7,042,124 for properties, at a profit of \$3,666,359 to the interests forming it. In 1923, when respondent acquired the Wilkes-Barre properties, its affiliate, Lehigh Power Securities Corporation, took a profit of \$537,284. In a similar transaction in 1924, pertaining to the purchase of what is now the Hazleton Service Depot, Lehigh profited by \$544,800. And in the 1928-1930 transactions, whereby the Harrisburg and Lancaster property groups came into respondent's system, the profits to affiliates were \$13,300,740.

If respondent's cost-to-company exhibit were in fact a statement of actual outlay, adjustment could be made for these intercompany profits, and for certain other inflationary items, for the amounts thereof are of record. However, as stated heretofore, the exhibit is not a statement of actual outlay but a hybrid of, first, actual outlay for about half the property, which had been constructed by respondent and, second, reproduction cost at date of acquisition of the other half, which had been acquired from predecessors; and the hybrid has been so produced that the two elements are not segregable. Accordingly, it is impossible to adjust respondent's

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exhibit so that it shows cost to company or any other element of rate base. We therefore find that the cost to respondent of its plant, electric or otherwise, is not determinable from the record.

C. *Historical Cost*

[8] The respondent prepared, but the Commission staff submitted as Exhibit 331, a statement showing that the historical cost (erroneously called "original cost" in the exhibit) of the electric property at December 31, 1942, was \$191,565,960, exclusive of working capital, material and supplies, going concern value, and cost of financing. The first three of the last four items are discussed in other sections of this order. Under the leading decisions, the cost of financing is properly includable as an item of reproduction cost, but not of original cost or its substitute, historical cost, unless it can be shown that such cost was actually incurred and charged to capital. The distinction arises from the fact that reproduction cost assumes a rebuilding of the entire plant at one time, and, therefore, that the company would be required to put up at once the amounts of brokerage Commissions and other costs incidental to financing. On the other hand, historical cost is determined from the point of view of the actual history of the property, and the cost of financing, like bond discount, is amortized over the life of the securities by an annual charge identical, in all practical respects, with annual interest. Respondent has not shown that it incurred or capitalized cost of financing, as is required to support its claim.

[9-13] The company's historical

cost contains certain other items which require mention. The first of these items is one of \$12,308,603, which the company explains as "representing the cost of the opportunity of integration, now translated into going concern value." Witness Carhart testified that the "original cost" of all tangible property had been determined by inventory and appraisal, the "enhancement in structural value of the tangible property was determined from the date of the original cost to the date of acquisition" by the company, cost of going concern value of predecessor companies was found, as well as the cost of organization franchises and consents, and that after the total of all these had been fixed, the integration value was established.

The second item arises from the purchase in 1942 from the Susquehanna Collieries Company of a steam generating station and associated property at a cost of \$465,627, but which the company has included in historical cost at \$2,425,479. Historical cost of public utility property has always been interpreted to mean the estimated cost to the corporation or other entity which first devotes it to public use. This definition has been applied in recognition of the fact that market prices of properties increase over the years (compare respondent's reproduction cost estimate with its historical cost), that a public utility will frequently pay more to a private owner for property than its cost to him, and that it should be allowed, as its own historical cost, not only the cost to the private owner but the profit which the private owner takes as well. The date of devotion to the public use is the date of the determination of historical cost. The Sus-

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quehanna Collieries Company was a coal company which had never admitted the jurisdiction of this Commission; nor had the Commission claimed such jurisdiction; nor was the company in fact holding itself out to serve all who come, which is an essential characteristic of a public utility; nor did it seek our approval under § 202 (d) of the Public Utility Law, when it ceased operating its facilities; nor did respondent, when it acquired the plant some time after such cessation, deem it necessary to obtain our approval of such acquisition under § 202(e), as would have been required if Susquehanna Collieries had been a public utility. Respondent, however, has disregarded this fact and has included, as historical cost, not its own expenditure, but the expenditure of the coal company.

The third item concerns general office administration, and interest on general office administration, incurred during property construction. During the time of construction of the property, the officers of the company are presumed to divide their duties between supervision of construction and of current operations. Consequently, while construction is going on, a part of the officers' salaries, ordinarily charged to operating expenses, is charged instead to the capital cost of the plant, and is labeled as administration during construction or some other descriptive title. This practice was followed by respondent and its predecessor companies. However, witness Carhart, exercising his present judgment in lieu of that exercised by the officers of the company at the time the construction was undertaken, has concluded that the amount of ad-

ministration overhead charged to plant is too little by the amount of \$2,183,-235. In any case, the division of officers' salaries between operating expenses and capital is a matter of judgment, and it seems reasonable to suppose that the judgment exercised on the spot, at the time, is more reliable than witness Carhart's unsupported evidence.

As a fourth item respondent has included in its historical cost \$2,048,442 for organization expense, of which 91.5 per cent, or \$1,874,324, is allocated to electric plant. Witness Carhart testified that the following components entered into the element of organization:

Organization costs of respondent ..	\$605,803
Acquisition costs paid by respondent to acquire predecessors	242,639
Estimated acquisition costs included in price paid by respondent for purchased property	500,000
Estimated organization cost of predecessor companies	700,000
Total	\$2,048,442

He further testified that "excluded from this account are the costs of obtaining charter rights for rendering electric, gas, and steam service by township companies. These go into the accounts for franchises and consents."

The two items of acquisition costs, in the amounts of \$242,639 and \$500,000, while they may be a legitimate element of cost-to-company, obviously are not part of the "original cost of construction" which *Smyth v. Ames* (1898) 169 US 466, 42 L ed 819, 18 S Ct 418, and Art. V, § 20, of The Public Service Company Law contemplate, or of the historical cost substitute.

Taking into account the fact that

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costs of organizing respondent are already included at \$605,803, and that the costs of obtaining charter rights "for rendering electric, gas, and steam service by the township companies" are included in another account (Franchises and Consents), it follows that the \$700,000 item given in the above table must be the cost of organizing companies which secured no charter rights directly and are now out of business. Whatever the method of evaluating property for rate case purposes, there is general agreement that the only property to be considered is that which is now in existence and used or useful in the public service, and we think the principle applies here.

In summary, respondent claims an historical cost of electric property of \$191,565,960. This figure includes \$17,771,704 of items of questionable character which, if deleted from it, would produce an historical cost of \$173,794,256.

D. Accrued Depreciation

[14, 15] The principal evidence offered by respondent, which produced the figures upon which it relies, was presented by witness Carhart, who found that the accrued depreciation applied to the reproduction cost of respondent's electric property at December 31, 1942, was \$29,419,674. Respondent's witness Reinicker offered no dollar figures, but attempted to corroborate Carhart's lives, based on economic factors inherent in respondent's plant.

Carhart's method of determining accrued depreciation is complicated and highly technical, and the following discussion, though lengthy, is necessary to an understanding of the sub-

ject. Respondent claims that there is some analogy between his processes and those of life insurance, and resort to that analogy and to insurance terminology will be made from time to time for purposes of clarity.

Thus, just as the American Experience Tables of Mortality, used by life insurance companies, attempt to predict how many human beings out of 100,000 at age of ten will die in each ensuing year, so also has Carhart used mortality tables to predict, for example, how many gas meters out of 100,000 will be retired when one year old, two years old, etc. And just as life underwriters have used the American Experience Tables as a basis for building life expectancy tables, in recognition of the fact that the greater the attained age of a human being, the greater his over-all span of life is expected to be, so Carhart has built life expectancy tables to show that, for example, a gas meter at its date of installation ("birth," so to speak) has a life expectancy of thirty-five years, but that if it has not been retired at thirty-four years of age it can be expected to attain an over-all life of nearly forty-six years. For clarity, we will discuss Carhart's mortality and life expectancy tables before dealing with the next step in his process.

1. Mortality and Life Expectancy Tables

The American Experience Tables, used to predict the lives of human beings who are selected as insurance risks after physical examination, are based upon past experience with other human beings residing in the same country, who are of the same sex, and who also were selected after physical

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examination. That is to say, the subjects studied to create the tables, and the subjects to whom the tables are applied for forecasting purposes, are similar and comparable.

Carhart's mortality tables are of three general classes. The only kind of property in the first class is gas meters, and its characteristics are that Carhart was able to identify the date of "birth" of every gas meter owned by respondent at January 1, 1928, and that the meters have had or are approaching a complete life-cycle. It should be noted that he did not have data for all gas meters, but only for survivors at January 1, 1928. Thus, of all meters installed in 1871, for example, he knew nothing with respect to any of them retired between 1871 and 1927, inclusive. However, from the information in his possession, he set up a table of "deaths" from 1928 to 1937, inclusive, so that he knew how many of the meters retired in 1928 were installed in 1871, 1872, etc., how many retired in 1929 were installed in 1871, 1872, etc., and so on through 1937. From this, he was able to show how many gas meters, retired between 1928 and 1937, were one year old at retirement, two years old, three years old, etc.; also how many survivors there were at each age; and finally, the average life of the meters retired between 1928 and 1937. Superficially, this looks very similar to the American Experience Tables.

Actually, however, the data are unreliable, principally because Carhart did not have the information, and consequently could not study all retirements for all the gas meters, but selected 1928-37 as the band of years for retirement analysis. The Commis-

sion's witness Curry, who, like Carhart, studied all of respondent's gas meters, but who selected various bands of years, obtained the following results as shown in Exhibit 333:

Band of Years Studied	Resulting Years of Average Life
1928-37 (10 years, used by Carhart)	35.59
1928-32 (5 years)	30.39
1933-37 (5 years)	40.68
1938-42 (5 years)	42.13
1928-42 (15 years)	38.87
1933-42 (10 years)	41.93

This table shows that the result of a mortality study for a "band" of years is strongly controlled by the particular band selected. Thus, the largest average life (42.13 years) given above is 40 per cent greater than the smallest figure (30.39 years). Not only the average life, but the mortality dispersion and life expectancy figures also, are subject to these variations. It is obvious that within certain broad limits, any result desired can be attained by careful selection of the retirement band of years. This criticism applies with equal force to the second class of tables discussed below.

The second class of Carhart's tables deals with chestnut poles, distribution transformers, and electric meters, the characteristics of which are that he was able to obtain mortality data for only a part of each kind of property, or that property of that kind had not completed a life-cycle, or both. Studies for these kinds of property produced "stub-end" tables (often represented graphically as curves, in the record), analogous to the American Experience Tables as they would be if lopped off at, say thirty years, so that nothing would be known of the life spans of individuals surviving that age. To ex-

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plain what Carhart did with these kinds of property in an attempt to secure complete mortality tables, it is necessary to digress to another matter.

In 1935, the Engineering Experiment Station of Iowa State College issued its Bulletin 125 entitled "Statistical Analyses of Industrial Property Retirements," prepared by R. Winfrey, research engineer. The general character of the analyses may be gathered from an excerpt in the foreword of the bulletin:

"Though, in practice, probable service lives are determined by various methods, the most reliable are those statistical methods which take into consideration retirement experience of *similar property*. This report presents five methods of assembling data for constructing survivor curves . . . A process is established whereby these 18 curve types can be used to determine the average life of any property for which only a stub or incomplete survivor curve is available. . . ." (Italics ours.)

The Iowa study comprehended 176 kinds of property, of which the following are typical: [List omitted]. From data gathered upon these kinds of property, the author of the bulletin derived 176 mortality curves. However, many of these curves showed characteristic shapes, so that, by mathematical processes, he synthesized them into 18 typical curves, of three main groups:

1. Left modal, in which *more than half* of the group are retired when the average life of the group is reached (simplified example: A group of three units, two of which are retired at age 3 years, and one of which is re-

tired at age 6 years; average life 12/3-4 years).

2. Symmetrical, in which *just half* of the group are retired when the average life is reached (example: A group of four units, two of which are retired at age 3 years, and two of which are retired at age 5 years; average life 16/4-4 years).

3. Right modal, in which *less than half* of the group are retired when the average age is reached (example: A group of three units, one of which is retired at 3 years, and two of which are retired at 6 years; average life 15/3-5 years).

There are six left-modal, seven symmetrical, and five right-modal curves, a total of 18, in the final group produced by Engineer Winfrey. The variation of curves within each class depends upon whether the retirements are "bunched," or spread out more or less equally over a relatively long period.

Returning now to the discussion of Carhart's stub-end mortality curves, he selected an Iowa curve, the beginning of which appeared similar to his stub curve, and used that Iowa curve to predict mortality, and consequently life expectancy, for the kind of property from which his stub curve was derived.

Before discussing the propriety of this method, we will deal with the third, and last, class of Carhart's tables. Whereas the first class included only one kind of property (gas meters), and the second class included only three, the third class contained no less than 280 kinds of property. On these, Carhart had no significant mortality data whatsoever. Consequently, going to the Iowa curves, he selected

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one left-modal, one symmetrical, and two right-modal curves as those he believed most applicable to respondent's property, and after making slight mod-

ifications of his own, he recast each of these curves upon the basis of a number of assumed average lives, as follows:

Type of Curve	Assumed Average Lives											
CL-1	10,	15,	20,	25,	30,	35,	40,	50,	60,	75,	100	
CS-1	10,	15,	20,	25,	30,	35,	40,	50,	60,	75,		100
CR-1	10,		20,	25,	30,	35,	40,	50,	60,	75,		100
CR-2					30,	35,	40,		60,	75,		

For each of the 280 kinds of property, he then exercised his judgment, first, as to the type of curve which the mortality of the property would probably follow and, second, as to the probable average life of all the units of that kind. For instance, in considering the driers and pulverizers used by respondent to prepare coal for burning at its generating stations, Carhart assumed that their mortality would follow the right-modal type, i. e., that the majority of units would survive the average life. Next, he assumed that the average life would be forty years. He then went to his CR-1 type, 40-year average life curve, for all data concerning probable mortality and life expectancy of this equipment.

The whole purpose of these mortality curves was to determine the probable number of years of future life remaining in each item of property. Thus, using the coal pulverizers as an example, Carhart might determine that one of the units had been installed in, say 1920. At 1940, therefore, it was twenty years old. From the CR-1, 40-year average life curve, it appears that a 20-year old unit has a future life expectancy of slightly over twenty-seven years. Life expectancy was thus obtained for all but a few minor kinds of property which, instead of being treated as units, were grouped for computation purposes.

There is one important variation of this procedure that should be noted, and that is that Carhart, after having established his mortality curves, inspected certain types of property in the field, and adjusted life expectancies of individual units as a result. These types included buildings, some tanks and standpipes, some compressors, some pumps, some ash and coal conveying systems, and water gas sets. On this point, Carhart testified that the Lansford substation building typifies his process. His general mortality curve for buildings of that type was right-modal, with a 75-year average life. The Lansford building, at the time of Carhart's computation, was twenty-two years old, and from the curve just mentioned, it was found to have a future life expectancy of about sixty-one years, but Carhart, upon examining the property, concluded that the true life expectancy was seventy-three years. Now, while he accepted the revised life expectancy, he adhered to the 75-year-average-life curve for all his ensuing computations. That curve shows that a unit of property has a life expectancy of seventy-three years when it is three and one-half years old. And, as Carhart admitted, while he is dealing with a unit whose expected over-all life is ninety-five years and whose actual age is twenty-two years, his computations assume that the over-all life

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of the unit will be seventy-six and one half years, and that its age is only three and one half years. That is to say, using the known age, and accepting Carhart's own life expectancy derived from actual examination of the property, 22/95, or 23.2 per cent, of its life has expired; but the end-result of his calculations is that 3.5/76.5, or only 4.6 per cent, has passed. The effect of this error on accrued depreciation is obvious, and is of major importance since the process was applied to all field-inspected items.

2. The Present-worth Method

Having reviewed Carhart's processes of obtaining life expectancies for the various units of property, let us see what he did with them.

Suppose a person agrees to pay a life insurance company an annual premium of \$1, beginning immediately, for a 4-year term insurance policy. The dollar payable immediately is worth its full value to the insurance company but the promise to pay \$1 a year hence is worth less, for since it is not in the company's hands during the year of waiting, interest upon it is lost. Assuming that the company can earn 6 per cent on investments (and leaving out the possibility of death, which is not pertinent to this explanation), the value to the company, at the time of writing the policy, of all the premiums, is computed as follows:

Dollar to be Paid	Divided by	Present Value
Now	1.00	\$1.0000
1 year hence	1.06	.9434
2 years hence	1.062	.8900
3 years hence	1.063	.8396

Total present value of all promises \$3.6730

Now suppose that two years have elapsed, and it is desired to determine

the then-present-worth of the future promises. The computation is:

Dollar to be Paid	Divided by	Present Value
Now (the third premium)	1.00	\$1.0000
1 year hence (the last premium) ...	1.06	.9434
Total present value of remaining promises		\$1.9434

The extent to which the present value declines over two years is then measured by the difference between \$3.6730 and \$1.9434, or \$1.7296.

If the reader will substitute years for dollars in the above computation, he will understand Carhart's method for determining accrued depreciation from his life expectancies. To illustrate by simplified example, suppose that at December 31, 1942, respondent owned a pole type lightning arrester which had been in service five years. Carhart judged that this item had a mortality typified by a CL-1, 10-year average life curve. At the outset, the arrester had a life-expectancy of ten years. The present worth at the date of *installation*, expressed in years of future use, would be:

Year	Value of Year's Use (6% Factor)
1938	1.0000
1939 .....	.9434
1940 .....	.8900
1941 .....	.8396
1942 .....	.7921
1943 .....	.7473
1944 .....	.7050
1945 .....	.6651
1946 .....	.6274
1947 .....	.5919

Present value of arrester at time of installation 7.8018 years' use

However, at December 31, 1942, the arrester is no longer new. Reference to the CL-1, 10-year curve shows that an item five years in service has a

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life expectancy of about seven years. So the present worth of the unit at December 31, 1942, is as follows:

Year	Value of Year's Use (6% Factor)
1943	1.0000
1944 .....	.9434
1945 .....	.8900
1946 .....	.8396
1947 .....	.7921
1948 .....	.7473
1949 .....	.7050
Present worth of arrester at December 31 1942	
5.9174 years' use	

The decline of the present worth between the date of installation and December 31, 1942, is the difference between 7.8018 and 5.9174, or 1.8844 years' use. Since this is 24.15 per cent of the present worth at date of installation, the accrued depreciation according to Carhart is therefore 24.15 per cent. If the reproduction cost new of the arrester were \$100, Carhart's accrued depreciation on it would be \$24.15.

Respondent's vice president Reinicker testified at length, for the purpose indicated in the following statement of respondent's counsel:

"Mr. Reinicker is not offered as a witness on depreciation, but because of his wide acquaintance with these large units of property he is offered as a witness to testify as to . . . what will be their probable life, which is only one element in Mr. Carhart's study."

Excerpts from witness Reinicker's testimony follow:

" . . . as a result of Mr. Blanchard's testimony being so different from Mr. Carhart's testimony I have gotten busy and gone into this thing more thoroughly and crystallized my ideas as to probable life into terms of not specific years, but by comparison of my ideas with those of Mr. Carhart

and Mr. Blanchard have expressed an opinion as to particular lives. . . . my testimony is about these units of property on which we have no actuarial data . . . it is these large turbines, boilers, buildings on which neither we nor the industry have sufficient data . . . "

"I cannot see how it is possible to make a proper and reasonable estimate of probable future life of these classes of property without the informed judgment obtained from close association with the property and detailed study of its history. . . . I believe I am in a much better position than either Mr. Carhart or Mr. Blanchard to estimate the probable future lives of those classes of property to which I referred in which a thoroughly informed judgment must play so large a part."

"These buildings can reasonably be expected to last, with proper maintenance, much longer than the additional fifty-four years which Mr. Carhart has estimated . . . I estimate that the remaining life . . . will be more nearly twice the thirty-nine years estimated by Mr. Blanchard."

"For all these reasons, I believe Mr. Carhart has been too conservative in his estimates of lives of the boilers and turbines at this plant."

"Mr. Blanchard's estimated results in six, fifteen, and sixteen years of remaining life for the three turbo generators. Mr. Carhart's estimate . . . results in seven years remaining life for all of them. . . . I estimate that these units will have additional lives . . . at a minimum of twenty-five years."

Reinicker's testimony, for the most part, was a discussion of the construction, improvement, and operation of

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parts of respondent's plant, and the probable effect thereof upon remaining life. His conclusions, in the main, were that neither respondent's witness Carhart nor Commission witness Blanchard (whose testimony will be discussed hereafter) had accurately forecasted the lives of this part of the property, but that Carhart's lives, being longer, were better than Blanchard's.

Since Reinicker testified as to only a fraction of the property, since he reached no depreciation figure but tended only to show that Carhart's lives as to these parts, though wrong, were better than those of an opposing witness, and since Carhart's study has been shown deficient in various respects, Reinicker's testimony does not help us in reaching a figure for accrued depreciation.

3. Summary of Carhart's Results

We will now summarize the characteristics of Carhart's method, and the faults of his results, in the sequence in which they appear in the foregoing discussion. First, he derived from respondent's own experience a complete mortality curve for only one kind of property, namely, gas meters, which have no bearing whatever upon depreciation of electric plant. He also had a few stub mortality curves, derived from respondent's own experience, but both these and the one complete curve were obtained from a study of a band of years, the selection of which is known to control the result.

Second, curves for the preponderant mass of property were derived from studies of property of entirely different location, character, material, and use,

and subjected to differing causes of mortality.

Third, the choice made by Carhart of four Iowa mortality curves, and his choice of average lives upon which those curves were drawn, are not in any way supported by the experience of respondent.

Fourth, the mathematics applied to field inspection grading produced serious distortion of known facts (i. e., the ages of plant items), and therefore of the results.

Fifth, the use of 6 per cent as a factor was stated by Carhart to be based on an assumed allowable rate of return. There is no apparent connection between that assumed rate and the actual depreciation of the property.

Sixth, the whole study has for its foundation the supposition that accrued depreciation is measured by differences in present worths of future years' use.

Carhart himself stated that so far as he knew, his method was unique in rate case history, and with that statement we cannot disagree.

As recently as February 2, 1944, the depreciation committee of Edison Electric Institute (the national association for electric companies) said:

"The reliance on statistical age-life studies of depreciation rests on a *supposed similarity between human mortality* as applied to life insurance and *plant mortality* as applied to depreciation. But these examples show quite clearly that *such similarity does not in fact exist*; that plant mortality does not have consistency or uniformity from one generation to the next, which is fundamental to the reliable use of age-life methods of computing depreciation. Experience shows wide varia-

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tions in life estimates as between one date and later dates, wide variations in the rate of retirement for a given age, differences in the 'dispersal pattern' of retirements, and erratic changes in the factors causing retirements—all of which have a major effect on age-life computations." (Italics ours.)

Certainly Carhart's method does violence to the superior court's opinion in *The Peoples Natural Gas Company Case* (1943) 153 Pa Super Ct 475, 51 PUR(NS) 129, 139, 140, 34 A(2d) 375, parts of which read:

"The difficulty with any theoretical method of estimating lives is perhaps apparent from the foregoing discussion of Farstadt's testimony. Even though the tables be the best available, they are open to the same objections which have induced our supreme court to restrict the admission of human mortality tables in negligence cases. . . .

"Except for the mortality of plant caused by fire, floods and other accidents, which should not be considered in determining present value (a brand-new compressor is still brand-new although it may be destroyed by an explosion tomorrow), there are but two factors which determine mortality, (1) physical deterioration and (2) obsolescence. In determining these factors, *it seems that there never can be an adequate substitute for actual observation of the condition of the property coupled with a study of its state of obsolescence.*" (Italics ours.)

A Commission witness, Blanchard, did make an "actual observation of the condition of the property coupled with a study of obsolescence," from which he derived over-all lives for respondent's plant; from dates of installation

furnished by respondent, he obtained the ages of the plant items; and from the combination of those elements with respondent's reproduction cost estimate, he developed a straight-line accrued depreciation at December 31, 1940, of \$83,904,767 for electric plant, which would work out to about \$94,000,000 at December 31, 1942.

One of the fundamentals of Blanchard's depreciation figures is his estimate of over-all lives. On cross-examination, he stated repeatedly that those lives were "a judgment figure based on the age, the standard of maintenance, the use, and the future probable life of that property."

It is quite apparent that Blanchard's lives in no way depend upon the ages of the property. In addition to specific instances scattered through the record, the following excerpt from Blanchard's testimony is significant.

Q. Then you did use the same average lives for young property that you used for old property?

A. I believe I answered your question just now. Yes, that would be the same answer.

Q. The answer is yes?

A. That is what I just answered you.

It is also apparent that Blanchard's over-all lives are not dependent upon the future probable lives, and for the same reason, that is, that both "young" and "old" items of any single class of plant were given the same average over-all lives.

The foregoing comments are intended neither to approve nor to disapprove the concept that age or probable future life is a necessary ingredient of over-all-life estimation, but simply to show that of the four ingre-

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dients mentioned by Blanchard, two were not actually taken into account.

Blanchard did consider the standard of maintenance, the use of property, the character of territory served, and the probabilities of increased demand which might hasten obsolescence or inadequacy. But these considerations were based upon very sketchy field examinations, as follows:

Plant examined	Time Spent	
	Hours	Minutes
Steam generation	25	47
Hydro generation	17	30
Transmission and distribution	91	15
	—	—
Total	134	32

Cross-examination developed that three hours and thirty-five minutes was the longest time spent on any one generating station; that no internal examination was made of boilers; that Blanchard couldn't say whether a smokestack was or was not lined with firebrick; and in general, that the field inspections were made so rapidly that no sufficient basis was established for the exercise of a full and reasonable judgment.

The Commission recognizes that the cursory nature of this field examination is due to the multiplicity of assignments which the few electrical engineers on its staff are required to execute; but while this fact may explain the causes, it does not justify the acceptance of the results as a basis for a finding of accrued depreciation.

The Commission thus finds before it two depreciation studies, presented by opposing witnesses; one of them wholly dissociated from anything which either we or the courts have recognized as accrued depreciation of property; the other, a compliance with

recognized principles in theory, but lacking the factual basis upon which those principles can be given practical application.

We will disregard the end results of both studies. Having informed our judgment by considering those facts and opinions of each witness which appear to be least speculative, the annual retirements of respondent's property as shown in the reports of record, and the experience of electric utilities in this commonwealth, we find that the accrued depreciation applicable to respondent's depreciable electric plant at December 31, 1942, was 15 per cent.

E. Going Concern Value

[16] As has been heretofore indicated, respondent has claimed going concern value of \$25,000,000 upon all three bases, i.e., reproduction cost, cost to company and historical cost. Of this amount, \$24,000,000 is ascribed to the electric business.

Witness Carhart did not present evidence as to the lag in earnings in the early years of development of respondent, nor is his figure a calculated one upon any other basis. It is a judgment figure, supported by rather lengthy testimony, the substance of which consists of a review of the territory served by respondent, statistics as to the average length of service of employees, information as to the capacity of the generating stations and the kind of fuel used, a brief history of respondent's development from its inception, and, in general, of a brief summary of all the affairs of respondent. Respondent's counsel indicated the purpose of this testimony as follows:

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"Mr. Examiner, we believe that we are entitled to present to the Commission for its consideration all the facts that, in the opinion of the witness, bear upon going concern value, and the line of materiality and relevancy I do not believe can be drawn against us anywhere. The idea of going concern value is, of course, a difficult one to deal with, but we are entitled, we believe, to present our view with all the facts that we believe to be relevant, whether in the mind of counsel for the Commission or even in the mind of the Commission itself, upon reflection, they might consider them immaterial."

The Pennsylvania superior court, as well as other appellate courts, has held that no special separate allowance need be made for going concern value: *Solar Electric Co. v. Public Utility Commission* (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447. The going concern value is an element which, under the court opinions, is a weighting factor in determination of fair value, and such fair value is a matter for the Commission's judgment. The Commission, therefore, will give witness Carhart's supporting testimony due weight in arriving at that judgment.

F. Working Capital

[17-20] Respondent submitted, as Exhibit 350, a claim for working capital at December 31, 1942, applicable to electric property, in the amount of \$8,857,584; and of this amount, \$4,135,479 is applicable to materials and supplies and \$4,722,105 is claimed for cash working capital. The latter figure is further analyzed as follows:

One and one-half months' operating expenses (excluding taxes and retirement reserve appropriations)	\$2,595,835
Necessary bank balances	1,634,923
Necessary working funds	199,264
Average prepaid expenses	292,083
Total	\$4,722,105

The first of these items is a proper computation for working capital purposes and represents respondent's cash outlay between the beginning of a monthly billing period and the date when collection for the service rendered during that period has been received.

In connection with the second item, witness Parkinson testified that at December 31, 1942, 124 banks with which respondent did business had some plan of service charge. He made a study of the minimum cash balances which certain of the banks required to be maintained (apparently to avoid the service charge on checks), and then applied his findings to all such banks. This testimony is faulty for a number of reasons. In the first place, no evidence was submitted to show that the practice of maintaining large balances is more economical than payment of the service charge which otherwise would be exacted by the banks. In the second place, it assumes that the cash required and made available to respondent in excess of out-of-pocket expenses is provided by the investment of capital. As a matter of fact, rates of respondent must be such as to reimburse it, in cash, for annual depreciation, the amount of which, in 1942 alone, was stated at \$3,200,000. Similarly, although respondent, as an ingredient of every bill it collects, receives some payment for taxes, the actual outlay therefor by respondent does not occur coincident with collec-

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tion, but long afterward. Taxes for 1942 were recorded at \$9,389,372. Obviously, these funds, not representing any investment by the company, are more than enough to take care of necessary bank balances. We will disallow the item of \$1,634,923.

The third item represents petty cash in the hands of employees and respondent's estimate of the working capital required for the Stanton generating plant, owned jointly by respondent and the Scranton Electric Company and administered by the latter. However, the costs of operating this plant, and the petty cash outlay disposed by respondent's employees, are already included in the operating expenses for which a working capital allowance has already been made. Consequently, these items are duplications, and their amount, \$199,264 will be disallowed.

The item of average prepaid expenses, to a certain extent, is a duplication, for it represents automobile

licenses and insurance costs, one-eighth of the annual amount of which is included in the operation expense working capital. The amount to be allowed is, therefore, seven-eighths of \$292,083, or \$255,573, and the amount we will disallow is \$36,510.

The sum of the amounts disallowed by us is \$1,867,697, resulting in a cash working capital allowance of \$2,-854,408. Adding to this, without modification, the company's claim of \$4,135,479 for materials and supplies, we find that the proper working capital allowance for electric rate base purposes at December 31, 1942, is \$6,-989,887.

G. Fair Value of Electric Property

We will now summarize the foregoing discussion of rate base elements, and we will begin by tabulating the various figures for electric plant that we have mentioned, taking into account our finding of 15 per cent for accrued depreciation:

	Reproduction Cost Based on Spot Prices	Reproduction Cost Adjusted to Average Prices	Histor- ical Cost as Submitted	Historical Cost Less Ques- tionable Items
Undepreciated plant	\$226,139,423	\$203,525,481	\$191,565,960	\$173,794,256
Land and land rights	10,752,391	9,677,152	10,355,017	10,355,017
Depreciable plant	\$215,387,032	\$193,848,329	\$181,210,943	\$163,439,239
15 per cent depreciation	32,308,055	29,077,249	27,181,641	24,515,886
Depreciable plant, depreciated ..	\$183,078,977	\$164,771,080	\$154,029,302	\$138,923,353
Land and land rights	10,752,391	9,677,152	10,355,017	10,355,017
Electric plant, depreciated	\$193,831,368	\$174,448,252	\$164,384,319	\$149,278,370

We have found that the evidence as to cost-to-company is unreliable and not worthy of consideration in a rate base finding.

The evidence includes a claim of \$24,000,000 for going concern value, upon which we made no finding but stated that going concern value would be considered in the rate base finding we are about to make.

We have found that the proper working capital allowance is \$6,989,-887.

There are two other points to consider. The first is that each of the undepreciated plant figures given in the above table includes \$413,218 for a leasehold and a small amount of allied property which reverted to the borough of Lehigh on May 1, 1943. Hence,

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while properly includible in plant at December 31, 1942, it has no place in a rate base being prescribed now for future application.

The other point is that, while the latest figures in the record for rate base elements are as of December 31, 1942, this decision is being made early in 1945, and due to war demands upon labor and materials there has been a considerable increase of prices over those of December, 1942.

Taking into account all the evidence, we find that the fair value of respondent's electric rate base is \$202,000,000.

II. *The Fair Value of Gas and Steam Properties*

[The Commission's determination of the fair value of gas and steam properties, omitted here for lack of space, is based upon the same principles discussed in the foregoing determination of rate base for electric properties. Reproduction cost of gas properties was stated at \$17,018,696. Reproduction cost of steam properties was stated at \$5,025,654. Cost to the company was rejected for the same reasons stated in connection with the electric rate base. Historical cost of gas properties was stated at \$12,174,078. Historical cost of steam properties was stated at \$3,691,751. Questionable items noted in connection with historical cost included "integration value," general administration, and organization relating to intermediary companies.

Upon consideration of obsolescence elements confronting manufactured gas and steam properties, together with factors comparable to those mentioned in relation to the electric plant, the Commission found that accrued depre-

ciation applicable to gas and steam plants at December 31, 1942, was 18 per cent and 25 per cent respectively.

No separate allowance was made for going concern value.

Allowable working capital for gas and steam heating operations was fixed at \$457,722 and \$287,465, respectively, by application of the principles stated with respect to electric properties.

Based upon a review of all the evidence, the Commission found the fair value of the company's gas rate base to be \$14,600,000, and the steam rate base \$3,980,000.]

III. *Rate of Return*

Respondent produced three witnesses who gave evidence as to rate of return: Coffman, vice president of Standard and Poor's Corporation; Hickey, a public utility consultant; and Deubler, a vice president of a Scranton bank.

[21] Neither Coffman nor Deubler approached the subject from the standpoint of what percentage return should be allowed upon fair value. Instead, each of them testified as to what income respondent should have available in order to make its outstanding securities attractive to investors.

Coffman testified that in order for respondent's securities to maintain a satisfactory rating with his company, it should be allowed a return of \$14,250,000, and that that sum was "the amount of return *needed* rather than a return which the company might be *entitled* to earn." An excerpt from Coffman's testimony follows:

"No matter whether the fair value was more or less than the amount of

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outstanding securities, you would look to securities and not to fair value?"

"If they were in the hands of the public, if they had been sold to the public, I would because the investors supplied all the money."

Cross-examination of Coffman disclosed that he had not reviewed the history of the securities to determine whether they had been issued for value, but accepted the present status for the purposes of his study. While he admitted that in his opinion the capital structure of respondent was unbalanced, his results were not adjusted by reason of that fact.

Deubler's testimony was very similar to that of Coffman, except that his figure, required to keep respondent's securities attractive, was \$14,000,000. He, too, accepted the present status of the securities without review of their history. He, too, said that his "concept of return relates to outstanding securities and other requirements, and not to property values."

The approach of these witnesses to the question of rate of return is a novel one, the acceptance of which would render unnecessary any determination of reproduction cost, original cost, accrued depreciation, or other rate base element, for outstanding securities would wholly replace fair value of property in the rate formula, and rate of return would be the interest and dividend percentage requirements upon those securities. This concept has never been accepted by, nor, so far as we know, previously proposed to, any regulatory body or court. In fact, in the Peoples Natural Gas Case (*supra*), where this Commission went only so far as to consider outstanding securities *in addition* to various property

values, the superior court specifically rejected that procedure. Since the present case was tried by both respondent and the Commission staff on accepted fair value principles, and since Coffman's and Deubler's testimony is irreconcilable with those principles, we must find that testimony of no evidentiary value in this case.

[22-25] Respondent's witness Hickey quite properly disregarded respondent's outstanding securities, and instead considered the location, size, and character of respondent's business in relationship to current business conditions, the current cost of money in the markets, the rate of earnings of American corporations, the ratio of those earnings to prices of the securities to which they are related, and similar factors. While he could not, of course, show any direct mathematical relationship between these factors and respondent's rate of return, he apparently considered all of them and gave his opinion that the return on electric fair value should be 6.5 per cent, and that an additional .125 per cent should be allowed upon the gas and steam fair values, over and above whatever the Commission may allow as a percentage return on electric fair value.

We have considered Hickey's factual testimony, the character and degree of risk of respondent's operations as they appear throughout the record of this case, the rates of return allowed in recent cases and the facts underlying them as compared with the facts here adduced (c. f. the 6.5 per cent rate of return in Peoples Natural Gas Case, *supra*, and the superior court's remarks sustaining it), from all of which we find that the fair rate of return upon

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respondent's electric rate base is 6 per cent. While we agree with witness Hickey that the gas and steam heat operations require a higher rate of return, we do not believe he gave adequate weight to the degree of risk involved (see our discussion under section II-D) when he testified that the additional .125 per cent would be an adequate compensation. We find that the fair rate of return upon respondent's gas rate base is 6.5 per cent, and upon its steam heat rate base 6.75 per cent.

These findings, applied to our rate base findings made heretofore, produce allowable returns to respondent of \$12,120,000 for electric operations, \$949,000 for gas operations, and \$268,650 for steam-heat operations.

IV. Revenues and Expenses

Unless otherwise indicated, the

figures used in this Part IV are those for the calendar year 1942, which is the latest year for which revenue and expense data were submitted and analyzed of record. The process of review will be to indicate what the company's income account per books shows, and then to comment and make a finding upon each item for which respondent claims a variation for rate purposes, or as to which we have a different conclusion.

Respondent's Exhibit 348 shows the following revenues and expenses, except that the depreciation appropriation of \$3,200,000 is not allocated among the three columns for electric, gas, and steam-heat service, but is so allocated in a footnote upon the basis of the Carhart study (see section I-D). For the sake of clarity we have distributed the allocated amounts in the table below:

	Electric	Gas	Steam Heat
Operating revenues	\$43,672,328	\$2,146,234	\$920,348
Operating expenses:			
Depreciation	2,851,840	240,000	108,160
Taxes	9,104,358	195,738	89,275
Other	20,783,571	1,677,718	679,867
Total operating expenses	\$32,739,769	\$2,113,456	\$877,302
Operating income	\$10,932,559	\$32,778	\$43,046

Aside from the charges for annual depreciation, respondent has various other annual expenses which cannot be charged directly to any one of the three public service operations it conducts, and these expenses are allocated among the three operations upon various bases selected by respondent. We have reviewed these allocations, and find them generally acceptable for rate purposes.

The remainder of this Part IV will comprise a discussion of various elements of the foregoing table.

A. Electric

[26] Respondent's position as to what should be allowed as the annual depreciation charge for electric property is not clear. As indicated above, respondent showed a total charge per books of \$3,200,000, without specifying what proportions were applicable to electric, gas and steam properties, but merely footnoted the charge, as follows:

"Depreciation (Retirement Appropriations) for the year 1942 include all classes of property.

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"The accretions charged to Account 503, Depreciation (Retirement Appropriations) closely approximate the amount shown as the appropriate accrual by the company's depreciation studies filed in the rate proceeding before the Commission at Complaint Docket No. 10867. These accretions would be segregated between departments, as shown below, if the basis of segregation were the ratios shown in Respondent's Exhibit No. 146 filed in the above proceeding, recalculated for 1942.

Department	Accretions Year 1942
Electric	\$2,851,840.00
Gas	240,000.00
Steam Heating	108,160.00
Total	\$3,200,000.00"

Respondent's witness Carhart, who testified as to accrued depreciation, presented Exhibit 369 entitled "Computed Depreciation Appropriations for 1942 on Cost to Company Basis," showing a figure of \$2,946,835 for electric plant annual depreciation, but neither he nor any of the other company witnesses indicated that either this, or any other amount, was the correct allowance for the operating expense depreciation item. Aside from this absence of claim, we can place no reliance upon the Carhart figure, first, because it is calculated by the same erroneous differences-in-present-worths method which we discussed at length in section I-D, and hence has no relationship to depreciation as defined by the courts; and second, because that present-worth method was applied to alleged cost-to-company figures which, as was explained in section I-B, are not in fact what they purport to be.

Commission staff witness Blanchard
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presented Exhibit 243-A, wherein he showed that if reproduction cost at December 31, 1940, were depreciated by the straight-line process, using his own estimate of property life, the annual amount would be \$5,161,724. However, as we stated in section I-D, Blanchard's lives were based upon insufficient examination of the property and must be rejected, even if reproduction cost were the basis of the annual allowance, which it is not.

Here again, as in the matter of accrued depreciation, we find ourselves with a record containing two approaches to the question of annual depreciation, each of which has been shown, upon analysis, to be unreliable. Here again, therefore, as in the matter of accrued depreciation, we are obliged to consider those facts and opinions of each witness which appears to be least speculative, the annual retirements of respondent's property and the experience and practices of electric utilities generally in the commonwealth; and, having done so, to exercise our judgment in reaching a conclusion.

Several recent expressions of the superior court upon the subject will serve to guide us in exercising that judgment. That court, in a number of cases, including *Cheltenham & A. Sewerage Co. v. Public Service Commission* (1936) 122 Pa Super Ct 252, 15 PUR(NS) 99, 186 Atl 149, has indicated that there should be some, although not necessarily an exact, relationship between accrued and annual depreciation; see also *Solar Electric Co. v. Public Utility Commission* (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447.

The superior court in the *Peoples*

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Natural Gas Case (*supra*) criticized both the appellant and the Commission for apparent discrepancies between accrued and annual depreciation. In the same case, the court appears to have viewed favorably an annual depreciation based in part upon the average annual capital loss due to retirements, with some additional allowance for the depreciation which is incurred annually upon the property which remains in service throughout the year. While the majority of the court did not indicate how the latter point was to be taken care of, President Judge Keller, in his concurring opinion, indicated the desirability of a compound interest method, wherein the interest factor represents the amount which the public utility can reasonably expect to earn upon its depreciation funds, wherever they may be invested. President Judge Keller went on to say:

"Consequently, in actual practice, these reserves for depreciation—especially as to items not replaceable for years—are often used in the enlargement and expansion and improvement of the utility, to the relief of additional capital expenditures; and they are entitled to have allocated to them their proportionate share of the incomes earned on the money so invested just as if the expansion and improvements had been paid for out of new capital raised by additional stock or bonds." (51 PUR(NS) at p. 149.)

It has been respondent's practice to reinvest its depreciation funds in its own plant, upon the fair value of which, as appears from Part III hereof, we are allowing a return of 6 per cent. Another pertinent fact is that about 5 per cent of respondent's plant (upon any basis of value) is represented by land or land rights, and hence is undepreciable.

Upon consideration of all the factors heretofore discussed, we find that the proper annual allowance for depreciation of respondent's electric plant is \$2,600,000.

The next subject for discussion is that of maintenance expense, which tends to vary from year to year, and consequently the expense in any one year cannot be accepted as the criterion for future allowance without careful scrutiny.

[The Commission, after a discussion of maintenance expenses, omitted here for lack of space, makes an allowance of \$1,350,000 for production plant maintenance in 1942. Allowance is also made in the amount of \$1,650,000 for annual maintenance expenses for transmission, distribution, and general plant. These conclusions are reached in view of the facts without rulings on regulatory principles.]

[27] Respondent's total operating tax accrual per books for 1942 was \$9,389,372, which respondent assigns as follows in its Exhibit 345:

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Type of tax	Electric	Gas	Steam	Total
Directly assignable to each service	\$1,937,219	\$29,274	\$7,596	\$1,974,089
Allocated on basis of operating revenues:				
Federal capital stock tax	147,303	7,744	3,003	158,050
State capital stock tax	427,878	22,496	8,723	459,097
P.U.C. assessment	34,959	4,530	656	40,145
Local taxes	19,909	630	292	20,831
Allocated on basis of operating revenues less expenses (other than depreciation and income taxes):				
Federal income normal tax	1,400,862	29,078	13,393	1,443,333
Federal income surtax	380,228	7,550	4,117	391,895
Federal excess profits tax	4,385,637	87,082	47,485	4,520,204
State income tax	370,364	7,354	4,010	381,728
Totals	\$9,104,359	\$195,738	\$89,275	\$9,389,372

Although, as has been stated, the foregoing figures reflect respondent's tax accruals per books, it is to be noted that the actual admitted tax liability, as shown by the returns filed as Exhibits 395, 396, and 397, differs from the book accruals in several important instances:

Type of tax	Book Accrual	Actual Return	Difference
Federal capital stock ..	\$158,050	\$150,000	\$8,050
State capital stock	459,097	423,775	35,322
Federal income normal	1,400,862	1,962,052	561,190*
Federal income surtax	380,228	692,590	312,362*
Federal excess profits	4,385,637	1,990,289	2,395,348
	\$6,783,874	\$5,218,706	\$1,565,168

(*) Denotes red figure

Since book accruals are merely recorded estimates of taxes made in advance of their final computation, whereas the returns reflect the final computations themselves, we will disregard the book figures where the returns differ from them. To do other-

wise is to allow an added return under the guise of taxes.

[28] The first taxes requiring specific discussion are those applied to capital stock, which respondent has allocated upon the basis of operating revenues. Both these taxes are levied upon a valuation of respondent's capital stock; in the case of the Federal tax, the basis is a "declared" value; the Pennsylvania tax is predicated on the "actual value in cash," measured by market price of the stock earnings, and intrinsic net worth of respondent. Hence, while earnings are a part of the measure, operating revenues have no connection with the tax. In our opinion these taxes should be allocated to the various services upon the basis that each contributes toward the value of the capital stock, and since our rate base findings measure each such contribution from both the asset and earnings standpoints, we will use them to reallocate the two capital stock taxes, as follows:

	Electric	Gas	Steam	Total
Fair value findings	\$202,000,000	\$14,600,000	\$3,980,000	\$220,580,000
Per cent of total	91.6	6.6	1.8	100.0
Federal capital stock tax	\$137,400	\$9,900	\$2,700	\$150,000
State capital stock tax	388,178	27,969	7,628	423,775
Total capital stock taxes	\$525,578	\$37,869	\$10,328	\$573,775

We find that the allowable capital stock taxes applicable to each type of service are as shown in the last line of the foregoing table.

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[29] We now turn to a discussion of Federal income taxes, the treatment of which is one of the most controversial subjects in rate regulation at the present time. The controversy arises in part from the fact that these taxes constitute a very large portion of utility expenses, and in part because, the heavy taxes having been imposed since the war began, the law upon the subject has not been settled by authoritative court decisions.

There has been a rather widespread tendency to allow for rate purposes only the normal tax of 24 per cent which was in effect in 1940, on the theory that the surtax and excess profits tax, subsequently enacted, are wartime emergency taxes and hence improper measures of future tax costs. Our objection to this view is that the governmental debt now being accumulated as a result of war financing will require peacetime taxation for its servicing and repayment, and although tax rates may not continue at their present levels, a return to anywhere near the 24 per cent rate appears most unlikely for many years to come.

[30] While there are many intermediate approaches, the opposite extreme is to allow all three types of income taxes for rate purposes. The difficulty with this approach lies in the manner in which the excess profits tax is levied. Thus, of \$2,457,146 subject to the tax, which customers paid respondent for services in 1942, only \$466,858 was retained by the company and the remaining \$1,990,288 was paid as an excess profits tax—which is another way of saying that as to this service, the customers were required to pay respondent slightly more than \$5 of profit in or-

der that it might provide \$1 of interest or dividends to its security holders. Within certain limits which need not be discussed here, this ratio could become 10 to 1—that is, the customer would have to pay \$10 of profit to the utility, only \$1 of which could be retained for itself.

Under the Revenue Act, a public utility has a choice of two methods of computing excess profits subject to tax. By one method the profits for the years 1936 to 1939 are averaged, and the excess of the current year's profits over that average represents the excess profits tax base. By the other method, the utility first determines its "invested capital," which is defined as including 100 per cent of its paid-in stock and paid-in surplus (collectively called "equity capital") and 50 per cent of its long-term debt (called "borrowed capital.") When the invested capital has been determined, the first \$5,000,000 thereof is allowed an 8 per cent return, the next \$5,000,000 is allowed 7 per cent, and all in excess of \$10,000,000 is allowed 6 per cent. These returns are then added together, and the excess of the current year's profits over the sum of the allowed returns becomes the excess profits tax base. However, when this method is used, the corporation is permitted to deduct only one-half its debt interest in determining current-year profits, whereas under the average earnings method, all debt is deductible.

Neither of these methods is reconcilable with the principles of rate making as laid down by our courts. Thus, respondent's earnings have increased over the 1936-1939 average, but so also has its investment in plant. As-

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suming for the moment that the increase in earnings and plant investment were exactly proportional, respondent could not use the average earnings method to escape the excess profits tax. Neither could it do so under the invested capital method, for plant investment and outstanding securities usually approximate each other, but by the method of determining invested capital under the Revenue Act, the outstanding securities are automatically discounted to the extent of 50 per cent of the funded debt. Consequently, any fair value of plant in line with court decisions must be considerably in excess of "invested capital" for any utility which is financed fairly heavily with indebtedness, and it follows that allowable return in a rate case must be likewise considerably in excess of "allowable return upon invested capital" for tax purposes. Hence, the only way for a debt-financed utility to escape the excess profits tax in the face of an increasing investment in plant is to re-

ceive no return on the increased investment. This is manifestly unfair, particularly inasmuch as most utilities, respondent among them, have increased their plant investments to provide the materials of war at the urgent request of the Federal government.

There is one further point which appears worthy of consideration. The position of the courts, and consequently of this Commission, has been that a public utility is entitled to earn a fair over-all return upon its plant, and that if it can finance a part of that plant with low-cost borrowed money, the fact that the stockholders thereby get a larger-than-fair return is not a justification for reducing the rate to the customer. For example, suppose a utility to have \$100,000,000 of plant, financed half by common stock and half by 3 per cent bonds, and that the allowed over-all return is 6 per cent. The distribution of earnings would be as follows:

Type	Security	Amount	Earnings	
			Amount	Per Cent
Bonds	\$50,000,000	\$1,500,000	3
Stock	50,000,000	4,500,000	9
Totals	\$100,000,000	\$6,000,000	6

It is well established that the 9 per cent earnings on the stock in the above example are of no concern to the customer, for they cannot affect his rates. But by the method of com-

puting "invested capital" under the Revenue Act, this earnings advantage is destroyed, as shown by the following simplified example:

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Earnings		\$6,000,000	
Add back 50 per cent of bond interest		750,000	
Earnings for excess profits purposes		<u>\$6,750,000</u>	
Invested capital:			
Stock (at 100 per cent)	\$50,000,000		
Bonds (at 50 per cent)	25,000,000		
Total invested capital	<u>\$75,000,000</u>		
Allowed return:			
8 per cent on first \$5,000,000	\$400,000		
7 per cent on second \$5,000,000	350,000		
6 per cent on remainder	3,900,000		<u>4,650,000</u>
Excess profits tax base			<u>2,100,000</u>
Tax at 90 per cent			<u>\$1,890,000</u>

In consequence of this tax, the earnings available to the stock in our previous table are reduced from \$4,500,000 to \$2,610,000, or from 9 per cent to 5.22 per cent—a figure lower than the initial 6 per cent over-all allowed return for rate purposes.

As previously stated, the customer has never been given the benefit of lower rates when a utility financed its plant with borrowed money. The question before us is as to whether the rule should work both ways—that is, whether, when tax legislation is enacted which penalizes previously advantageous financing, that penalty should be placed upon the customer to whom no corresponding benefit inured. We think the rule should work both ways, and our allowances for taxes will be premised on the assumption that a public utility is financed entirely with equity securities, when that assumption will be of benefit to the consumer. We now turn to the income tax computations.

Several factors affecting the mathematics must be considered. First, respondent had an excess profits credit adjustment of \$1,412,599 which is nonrecurring, and hence will be ex-

cluded from our calculations. Second, income taxes are levied upon income after interest has been deducted, whereas our allowed return on rate base is before deduction for interest—that is, interest is payable from the allowed return. Finally, there is a limitation on the excess profits tax which is operative here, and will be used in our calculations.

With these facts in mind, the first problem is to find that taxable income which, after taxes shall have been deducted, will produce our allowable return less bond interest. Such a figure, found by formulas which are too involved to insert here but which may be inspected in the Commission's offices, is \$21,755,275, as is shown by the following pro-forma tax return:

Line No.	Item	Amount
1	Net income, after interest ...	\$21,755,275
2	Average earnings—1936-1939	6,722,973
3	Specific exemption	5,000
4	Miscellaneous credits	36,168
5	Total credits	<u>6,764,141</u>
6	Excess profits net income	<u>14,991,154</u>
7	Tentative Excess Profits Tax #1 (90 per cent of line 6)	<u>13,492,021</u>

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Line No.	Item	Amount
8	Net income, from line 1	21,755,275
9	Dividends received credit ...	1,522
10	Excess profits net income	14,991,134
11	Total credits	14,992,656
12	Normal tax net income	6,762,619
13	Normal Tax (24 per cent of line 12)	1,623,029
14	Normal tax net income, from line 8	6,762,619
15	Dividends paid credit	3,846,532
16	Surtax net income	2,916,087
17	Surtax (16 per cent of line 16)	466,574
18	Net income, from line 1	21,755,275
19	Dividends received credit, from line 9	1,522
20	Dividends paid credit, from line 15	3,846,532
21	Total credits	3,848,054
22	Line 18 minus line 21	17,907,221
23	80 per cent of line 22	14,325,777
24	Normal tax, from line 13	1,623,029
25	Surtax, from line 17	466,574
26	Total normal and surtaxes	2,089,603
27	Tentative Excess Profits Tax #2 (line 23 minus line 26)	12,236,174
28	Excess Profits Tax (lesser of lines 7 and 27)	12,236,174
29	Post-war credit (10 per cent of line 28)	1,223,617
30	Net Excess Profits Tax	\$11,012,557
31	Net income, from line 1	\$21,755,275
32	Normal tax, from line 7	1,623,029
33	Surtax, from line 17	466,574

Type of Service

	Allowed Returns	Per cent of Total	Income Tax Apportionment
Electric	\$12,120,000	90.8706	\$12,729,726
Gas	949,000	7.1152	996,742
Steam	268,650	2.0142	282,162
Totals	\$13,337,650	100.0000	\$14,008,630

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Line No.	Item	Amount
34	Net excess profits tax, from line 30	11,012,557
35	Total Federal income taxes ..	13,102,160
36	Balance to respondent after taxes and interest	8,653,115
37	Interest	4,684,534
38	Balance to respondent after taxes but before Interest— i.e. The Allowable Return .	\$13,337,649

We therefore find the allowable over-all Federal income taxes at present rates to be \$13,102,160.

In 1943, the Pennsylvania income tax basis was changed, so that it is now imposed at the rate of 4 per cent on the net income after interest but before Federal income taxes. The first problem here is to find the income which, with the Pennsylvania income tax deducted, produces the \$21,755,275 with which we began our Federal-tax calculation. Such income would be \$22,661,745, as follows:

Line No.	Item	Amount
1	Net income	\$22,661,745
2	State Tax (4 per cent of line 1)	906,470
3	Balance before Federal Taxes	\$21,755,275

[31] We therefore find the allowable over-all Pennsylvania income tax to be \$906,470, and this, added to the \$13,102,160 already found for Federal taxes, produces a total of \$14,008,630 of allowable over-all income taxes. These we apportion to the various services of respondent upon the basis of our allowed returns on those services:

	Allowed Returns	Per cent of Total	Income Tax Apportionment
Electric	\$12,120,000	90.8706	\$12,729,726
Gas	949,000	7.1152	996,742
Steam	268,650	2.0142	282,162
Totals	\$13,337,650	100.0000	\$14,008,630

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We find that the allowable income taxes applicable to each of respondent's services are in accordance with the last column of the foregoing table.

We may now restate respondent's taxes to reflect the adjustments we have made:

Type of Tax	Electric	Gas	Steam	Total
Directly assignable to each service	\$1,937,219	\$29,274	\$7,596	\$1,974,089
Allocated on basis of operating revenues:				
P.U.C. assessment	34,959	4,530	656	40,145
Local taxes	19,909	630	292	20,831
Allocated on basis of rate base findings:				
Capital stock taxes	525,578	37,869	10,328	573,775
Allocated on basis of allowed returns:				
Income taxes	12,729,726	996,742	282,162	14,008,630
Totals	\$15,247,391	\$1,069,045	\$301,034	\$16,617,470

We find that the total allowable taxes applicable to each of respondent's services are as shown in the last line of the foregoing table.

The following is respondent's electric operating statement for 1942, adjusted to reflect our findings:

Operating revenues	\$43,672,328
Operating expenses:	
Depreciation	2,600,000
Taxes	15,247,391
Other	20,932,137
Total operating expenses	\$38,779,528
Operating income	\$4,892,800

B. Gas

As was shown in the introductory portion of Part IV, respondent's gas expenses for 1942 were \$2,113,456 per books according to its Exhibit 348, and of these, the only two requiring adjustment are annual depreciation and taxes.

The same lack of a definite claim as to annual depreciation that we noted in section IV-A is present here. The company's income statement, which reflects its book figures, shows \$240,000 as applicable to gas plant depreciation, and witness Carhart's Exhibit 369 provides a figure of \$245,944, but neither amount is put forth by the company as its claim. Furthermore, as we have noted previous-

ly, Carhart's method of computing depreciation lacks bases in fact, and his results, as such, cannot be accepted. Using the same processes of judgment described in section IV-A, we find that the allowable annual depreciation for respondent's gas plant is \$185,000.

As to taxes, we have already found the allowance for gas operation in section IV-A, in the amount of \$1,069,045.

We now recast respondent's gas income statement for 1942 by substituting our findings for taxes and depreciation:

Operating revenues	\$2,146,234
Operating expenses:	
Depreciation	185,000
Taxes	1,069,045
Other	1,677,718
Total operating expenses	2,931,763
Operating deficit	\$785,529

C. Steam

Respondent's steam expenses for 1942 per books were \$877,302 according to Exhibit 348, and of this amount, \$108,160 is assigned to annual depreciation. For reasons we have already described, it is necessary that we make a judgment finding upon this item, and accordingly we find that the allowable annual depreciation for respondent's steam plant is \$72,000.

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We have already found the total tax allowance for steam operations to be \$301,034.

The following is respondent's steam income statement for 1942 (per Exhibit 348), adjusted to reflect our findings:

Operating revenues	\$920,348
Operating expenses:	
Depreciation	72,000
Taxes	301,034
Other	679,867
Total operating expenses	1,052,901
Operating deficit	\$132,553

V. Findings and Order

There is presented below in tabular form a comparison of our allowed returns with the returns actually earned by respondent based upon our allowances for operating expenses, depreciation and taxes:

Type of Service	Allowed Return	Earned Return
Electric	\$12,120,000	\$4,892,800
Gas	949,000	785,529*
Steam	268,650	132,553*

* Denotes red figure.

We therefore find and determine that the rates of respondent now in effect for its electric, gas and steam services are not unjust, unreasonable, or productive of an excessive return to the company; therefore,

Now, to wit, January 3, 1945, it is *ordered* nisi:

1. That the complaints docketed at C. 9556 and C. 10867 be and are hereby dismissed.

2. That, unless exceptions are filed hereto, in conformity with Commission Rule of Practice No. 51, within thirty days of service hereof, this order shall become the final order in these proceedings.

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Buchanan and Morgal, Commissioners, file dissenting opinions.

BUCHANAN, Commissioner, dissenting: Strive as I will I can find very little to add by way of refutation of the conclusions reached by the majority than the text of the staff report incorporated in the majority order which text was designed to reach completely opposite conclusions.

In this result the order differs in no respect from the pattern of other Commission orders relative to Pennsylvania Power & Light Company matters before us in the immediate past. See in *Re Lehigh Valley Transit Co. and Pennsylvania Power & Light Co. (transfer of Allentown Steam Electric Generating Station)* A. 62206, September 2, 1943. In *Re Lehigh Valley Transit Co. and Pennsylvania Power & Light Co. (transfer of preferred stock)* A. 62416, October 11, 1943.

Certainly there is a contrast between the results obtained by this Commission as demonstrated by this order and the results obtained by the Commission between 1935 and 1938 during which time voluntary and involuntary rate reductions approximating \$5,000,000 were obtained.

The present order not only nullifies previous rate reductions but opens the door for future increases of 16 $\frac{2}{3}$ per cent on the basis of today's business and of 30 per cent on the basis of 1937 operations at the will of P. P. & L. I believe this decision determines finally the Lancaster rate issue—*Armstrong Cork Co. v. Pennsylvania Power & Light Co. C. 13716*, April 27, 1943.

This is regulation of public utility service by the public utilities them-

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selves, not by a governmental agency concerned with the public interest. The public interest has become solely the corporate interest. That is bureaucracy at its worst—a governmental bureaucracy controlled by partisan politics, not for the public good but for private gain at public expense. A governmental rubber stamping of corporate policy that is destructive of government itself.

Baldly this is a case where the officers of the public utility perpetuate themselves in office by the use of political power acquired through the far-flung organization and operations of the public utility. Those officers control the public utility and notoriously the politics of the area in which utility service is rendered and they remain in control of both through the concentration of voting strength in a holding company which has contributed not one penny to acquire such control.

The chief effect of the present order is to bolster the earnings value of the common and part of the preferred stocks which are lacking in supporting property values and by so doing it perpetuates that inequitable control of the holding company over a public utility chartered to render public service at just and reasonable rates which this order likewise negatives. Under a holding company management, which in this record received the blessing of John S. Wise, president of P. P. & L., and which blessing was reciprocated on the part of the holding company by keeping Mr. Wise in office, a deliberate policy for the circumvention of the regulation of rates and the security issues of P. P. & L. was laid down. The modus operandi is old and was reduced to letter form

in 1927 and constitutes Exhibit 270 in this record.

C. 10867 — Pennsylvania Power & Light Company

“Mr. Frank A. Reid

Office

April 18, 1927

In re: Pennsylvania Reorganization

“I suggest, therefore, so that *the Commission will find it much more difficult to unravel the cost of the various properties*, that we go before them with a plan that contemplates both the transfer of certain properties to Pennsylvania Power & Light Company as well as the formation of a new utility company, and also the transfer to the Lehigh Valley Transit Company of the railway properties, *so that it will be practically impossible for anyone to find out what the cost of any individual property was or the cost of any particular group of property.*

“I do not understand why \$2,-500,000 of electric light property is transferred to the East Penn Electric Company in place of \$1,500,000 railway properties, although I believe that in the general mix-up we can transfer any amount of property to the East Penn Electric Company in place of the railway property and it will not make any difference. I am, however, not entirely clear as to this and suggest that you talk to Root about it.

“It is the first reorganization that I have had anything to do with where a step-up in Plant Account was not made with property owned by individuals who could have no balance sheet, the *net effect of which was to make it impossible to trace the increase.**

“I again desire to impress upon you

*“That is exactly what has been done in plan. S. W. M. missed part of it.”

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the importance, in my opinion, of scrambling all these reorganizations together so that about the only thing the Pennsylvania Commission will be able to understand will be the result and not how the result was reached. Root's reorganization is too simple and too easy to follow, particularly (the increase in) the Plant Account of the Susquehanna reorganization from \$25,000,000 to \$61,000,000 through a merger.

"The net result of Root's plan as I see it is to have the whole Susquehanna situation cost Lehigh nothing, and while I believe that is a very salutary result in the ordinary case, —. Such a result, in my opinion, might start an investigation into our whole rate and financial structure in Pennsylvania and lead to all sorts and kinds of consequences." † (Italics added.)

The above quotations are excerpts from a letter from Samuel W. Murphy, late president of Electric Bond & Share Company, top-holding company in the system of which Pennsylvania Power & Light Company is the largest operating unit, to Frank A. Reid, senior partner in the law firm of Reid and Preist, then and now counsel for the Electric Bond & Share group with marginal notes by an unknown—probably Root, the author of the plan under consideration.

The letter is of record in this case as Commission's Exhibit 270 and likewise appears as Exhibit 389, File 59-12, of Securities and Exchange Commission in its § 11 action against Pennsylvania Power & Light Company, Electric Bond & Share, et al.

It establishes a definite lack of any

† "Don't see how Commission will see original costs as they are all on Lehigh's books."

moral or legal standards for the rendition of service for the accommodation and convenience of the public by Electric Bond & Share Company and by Pennsylvania Power & Light Company. It demonstrates a deliberate attempt to frustrate regulation of public utility affairs by any regulatory commission and particularly the Pennsylvania Commission in the public interest. Moreover it definitely states the opposition by Electric Bond & Share Company and P. P. & L. to rendering any helpful, informative or honest coöperation with the Pennsylvania Commission to obtain just and reasonable rates or toward equitable and proper security issues.

Restating the policy it was: To make it difficult to unravel the cost of properties—to make it practically impossible for the Pennsylvania Commission to find the actual cost of any individual property or group of property—to "step up" plant accounts in such a manner that the amount of the resultant "water" would be impossible of discovery—"scrambling" reorganizations so that only the result would be understandable—reorganizations that cost the holding company nothing—fear of the consequences of an investigation into the P. P. & L. rate and financial structures. With the present order this fear should be completely relieved.

Pennsylvania Power & Light Company was incorporated under date of June 4, 1920, as the result of a joint agreement of consolidation and merger dated April 12, 1920, between eight companies, as follows: [List omitted.] All of these companies were operating companies of substantial size with the exception of Pennsylvania Power &

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Light Company, which was a so-called "paper company."

Upon consummation of the merger forming the newly created Pennsylvania Power & Light Company on June 4, 1920, 92,880.81 shares of \$7 preferred stock (no-par value) were issued to the holders of the capital stock of the merging companies. In addition, 310,000 shares, consisting of the entire common capital stock of the new Pennsylvania Power & Light Company, were issued to Lehigh Power Securities Corporation (1).

During the period from 1920 to 1924, Lehigh Power Securities Corporation (1) converted its holdings of 65,000 shares of \$7 noncumulative preferred stock into 65,000 shares of \$7 cumulative preferred stock. No cash was involved in this conversion. In 1924 Lehigh Power Securities Corporation (1) sold its holdings of 65,000 shares of \$7 cumulative preferred stock as follows:

Jan. 17, 1924—	
Electric Bond and Share Company	
20,000 shares	\$1,850,000
Apr. 22, 1924—	
Dillon, Reed and Company	
20,000 shares	1,848,800
Aug. 24, 1924—	
Guaranty Company of New York, and Brown Brothers and Company	
25,000 shares	2,500,000
Total price received	\$6,198,800
Less: Commission and other expenses	177,300
	<u>\$6,021,500</u>

Lehigh Power Securities Corporation (1) eventually disposed of a few additional preferred shares held by it and retained only the 310,000 shares of common stock. A calculation to show the cost of the 310,000 shares of common stock and the preferred

stock issued to Lehigh Power Securities Corporation (1) as of the date of the merger, namely, June 4, 1920, has been made. On page 88 of Commission Exhibit 237 is a statement showing the cost to Lehigh Power Securities Corporation (1) of the preferred and common stock of the predecessor constituent companies exchanged for preferred and common stock of Pennsylvania Power & Light Company in the merger of June 4, 1920. The total cost on a cash basis is shown at \$3,556,231.05. However, Lehigh Power Securities Corporation issued 305,000 of its own shares in this connection to which it assigned a stated value of \$2,000,000. If it is assumed that the \$2,000,000 stated value placed upon its own common stock by Lehigh Power Securities Corporation (1) was representative of an actual consideration having value to the extent of \$2,000,000 the cost to Lehigh Power Securities Corporation would then be increased to \$5,556,231.05.

Even so the consideration received by Lehigh Power Securities Corporation (1) upon disposal of the preferred shares of Pennsylvania Power & Light Company, exceeded its investment in the shares of the predecessor companies to the extent of \$390,177.89, thereby indicating that, following consummation of the 1925 preferred stock sales, Lehigh Power Securities Corporation continued to retain the entire 310,000 common shares of Pennsylvania Power & Light Company at a negative investment or profit of \$390,177.89, assuming as was said above, that the \$2,000,000 of stated value of the common stock of Lehigh Power Securities Corporation was a proper cost.

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Summarizing, Lehigh Power Securities Corporation (1) in the merger of 1920 received 310,000 shares of Pennsylvania Power & Light Company common stock and in addition received \$2,450,602.89 in excess of the cash cost to Lehigh Power Securities Corporation (1) of the securities of the constituent companies that entered into the 1920 merger and this excess was subsequently increased to \$2,530,765.05 during 1927.

It follows that Lehigh Power Securities Corporation (1), which received the shares in 1920; its successor, Lehigh Power Securities Corporation (2), organized in 1926, which succeeded the first Lehigh Power Securities Corporation; and National Power and Light Company, which succeeded to Lehigh Power Securities Corporation (2) and is presently the immediate holding company of Pennsylvania Power & Light, have had a minus investment in the common stock of Pennsylvania Power & Light Company to the extent of \$2,530,765.05.

Nor is this fact denied by P. P. & L. in a volume prepared by the Pennsylvania Power & Light Company for use in connection with certain refinancing that took place in 1939, the company makes the following statement: "The aggregate stated value of securities issued to Lehigh Power Securities Corporation for the properties and net assets acquired from it exceeded the cost to Lehigh Power Securities Corporation of such properties and net assets by \$2,786,857.83."

The significance of the negative investment of National Power & Light Company is that without cost to it, National inequitably controls through

100 per cent stock control the officers and through them the policy of P. P. & L. The harmful effects of that policy as it relates directly to rates will be mentioned later, its effect upon the financial structure of P. P. & L. which, in turn, is principally responsible for the instant order, is my immediate concern. Very evidently this 1920-24 excursion into the frenzied financing of the 1920's was the prelude to the Murphy letter of 1927 and is evidence that Mr. Murphy, in writing the letter, knew whereof he wrote.

The capitalization of P. P. & L. as of December 31, 1942 and 1944, was as follows: [Table omitted.]

In response to our General Orders Nos. 49, 53, and 55 of the Uniform Systems of Accounts Prescribed for Electric and Gas Utilities, P. P. & L. filed on December 30, 1940, with this Commission and the Federal Power Commission reports covering the results of its electric plant reclassification studies. Following an examination of company's records, Federal Power Commission issued an order requiring company to show cause why it should not be required to classify certain amounts in a manner different from that proposed by company. And on November 10, 1944, at Docket No. IT-5873, Federal Power Commission issued its final order which in so far as this proceeding is concerned found that the original cost of the electric plant of P. P. & L. was \$144,776,435.22 as of December 31, 1937.

By its order of December 19, 1944, this Commission at E. O. C. No. 34 found substantially the same figure but differed somewhat from FPC in its accounting treatment of other items. The significance of this figure

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\$144,776,435.22 is that as of the same date December 31, 1937, P. P. & L. carried its plant account on its books in excess of \$211,303,329.73 or \$66,526,894.51 higher than cost. Digressing, it is with this last figure that the two Commissions split. Federal Power Commission directed that P. P. & L. write off the whole amount against income, i.e., charged to the stockholder while this Commission permitted \$25,000,000 to be charged against expense, i.e., the ratepayer. My reason for mentioning that difference is that operating expenses have been increased \$928,000 annually by the PUC method and depreciation reserve accumulations weakened by a loss of \$800,000, annually, to amortize fictitious values or a total sum of \$1,728,000.

Consistently throughout this entire record, P. P. & L. has resisted any attempt to reach an accurate original cost determination of its electric plant but to date it has not resisted either the Federal Power Commission's order or that of this Commission. In fact, it has at least tentatively acquiesced in both so far as original cost is concerned. Inasmuch as there seems to be accord on one thing at least between P. P. & L., FPC, and PUC, namely, that the original cost of used and useful property of P. P. & L. when first devoted to public use was approximately \$144,750,000, as of December 31, 1937, and that accord is a public record not only of this Commission but likewise of Federal Power Commission, it should follow that it receive proportionate weight in this case. Although requested so to do, P. P. & L. has utterly failed and refused to submit this information to the

Commission for the record, although admittedly now, it was available then. To me it has significance over all of the rest of the mysticism surrounding the attempt to deduce "fair value" from the welter of misinformation in this record.

Starting with an original cost of electric plant at December 31, 1937, of \$144,750,000 (rounded) there have been net additions and retirements to electric plant, including allocations of common plant, of \$21,588,826.59 to December 31, 1942, which rounded will give \$21,600,000 or total electric plant of \$166,350,000 at the latter date. I will make no attempt to bring this record up to December 31, 1944, because to do so will only reflect the abnormalities of total war.

I am in disagreement with the percentage for accrued depreciation of 15 per cent found by the majority as a minimum depreciation reserve requirement of this electric plant. This is not even a modern plant. P. P. & L. serves electricity in all or parts of 28 counties in the central and northeastern parts of the state. Its origin is one of merger and acquisition involving several hundred individual companies. The method of financing adopted by P. P. & L., and its top owner Electric Bond and Share, with each merger was one adapted first of all to get control of the new unit without cost to Electric Bond and Share; secondly, to get new securities into public hands whereby not only the cost of the new unit was financed but also additional capital was secured for further amalgamations and more financing, as we have seen above in the Murphy letter.

Good examples of obsolete generating plants normally not used nor useful

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in the public service but carried on the books at substantial values are Goodspring, Carlisle, Millersburg, and Lock Haven plants. Likewise there is the Allentown Steam Electric Generating plant recently acquired (1943) from Lehigh Valley Transit in one of those transactions sanctioned by this Commission for which Electric Bond and Share and its subsidiaries are notorious. In the Allentown Case a test run of the plant at the Commission's direction demonstrated that the facilities not only were not in condition to operate but also that the company had no intention of putting it into condition, Re Lehigh Valley Transit (1943) 19 PUC 10-16. While the test run has proved opportune in bringing about general improvement in the Allentown and other obsolete generating stations in time to put their hoary old shoulders behind the war movement, nevertheless after the war drums have ceased the obsolescence will be magnified by the postwar endeavor to modernize in the interest of operating efficiency and to help the wheels of industry to become adjusted to peacetime productions.

In view of the known obsolescence of plant the reserve requirement percentage should be substantially higher than that fixed by the majority. Carhart, the company witness, proved himself to be so biased in his judgment that no consideration could be given to his testimony. The Commission's witness, Blanchard, on the other hand while expressing his engineering experience with respondent's property perhaps went to the other extreme and overstated the depreciation requirement, although I am much more inclined to accept his version of condi-

tion in the light of our general knowledge of the plant age. The SEC standard for the depreciation requirement for modern electric facilities is 20 per cent on a straight-line basis but much of the plant here is not modern. My own opinion is that inasmuch as substantial portions of the generating equipment must be retired as obsolete as soon as the war demands are lessened, and that other portions of the property are quite aged, the reserve requirement on a straight-line basis is not less than 25 per cent of the depreciable property and probably should approach 35 per cent. I will adopt 25 per cent as the requirement.

Summing up the rate base.

TABLE I

Original cost electric plant	\$166,750,000
Land and land rights	10,350,000
Depreciable plant	\$156,400,000
25% depreciation	39,100,000
Depreciable plant depreciated ...	\$117,300,000
Land and land rights	10,350,000
Electric plant depreciated	\$127,650,000

As we have seen in the above tabulation the securities outstanding on December 31, 1942, totaled \$206,198,256 of which \$126,270,000 was long-term debt. On this basis the ratio of long-term debt to depreciated property \$127,650,000 would be 100.5 per cent¹ and total capitalization as of December 31, 1942, is excessive by the difference between \$206,200,000 and \$127,650,000 or \$78,550,000. With a 20 per cent reserve requirement, depreciated electric plant would be \$135,470,000 and, with 15 per cent, it would be \$143,290,000 resulting in

¹ This result is obtained without giving consideration to gas or steam property which I consider obsolescent and not worth more than their 1942 net income capitalized at 6 per cent about \$4,000,000.

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more favorable debt to plant ratios but by so doing there would be a blinking of the resulting bad depreciation reserve position caused by the age and obsolescence of the plant which after all, in a going concern, is the real security behind debt.

But the above calculations demonstrate another significant element in this rate muddle. If at a depreciation reserve percentage of 25, 20, or 15 the highest amount resulting for depreciated plant is \$143,290,000. This figure is not sufficiently large to support any common stock and only a small part (approximately 25 per cent) of the preferred. Therefore, it would appear that the whole capital structure is greatly excessive and out of proportion and makes more glaring the extremes to which the majority have gone to support it.

P. P. & L. introduced an elaborate exhibit entitled Cost to Company with the intent of showing the total cost of the electric plant to the company at the time of acquisition. Of course the results exceeded \$200,000,000 because that is the goal which must be obtained to save the common stock and through it National Power & Light Company and the executive officers of P. P. & L. However, the original cost study of FPC, *supra*, and of this Commission covered the identical ground which the respondent purported to analyze. The net result of the FPC and PUC findings in addition to the figure of \$144,750,000, original cost above mentioned, was \$25,930,121.01 chargeable in Account 100.5 Electric Plant Acquisition Adjustments and which amount, as to its integrity was not a matter of perfect accord between the two Commissions because of the dis-

similarity of treatment which the amount received from each. Nevertheless the amount appears in Account 100.5 in both orders and, for the purpose of this opinion only, will be treated as authentic.

By his letter to this Commission dated November 22, 1944, John S. Wise, president of P. P. & L., tentatively accepted the establishment of the amount of \$25,900,000, *supra*, along with other items, not of importance here, in Account 100.5 and proposed a method for its disposition through charges to operating expense, thereby according recognition to it by both parties as acquisition cost. If the original cost as of December 31, 1942, in the amount of \$166,750,000 should be increased by \$25,900,000 of acquisition costs, the resulting "cost to company" of \$192,650,000 would approximate P. P. & L. original cost untrended and undepreciated of \$191,565,960, after deducting from the claimed amount of \$221,000,000, such spurious "balancing" items as the \$12,483,586 appearing at page 2515 of the record. Applying the above method of calculating depreciated original cost:

TABLE III

Acquisition cost electric plant ...	\$192,650,000
Land and land rights	10,350,000
Depreciable property	\$182,300,000
25% depreciable	45,575,000
Depreciable plant depreciation ..	\$136,725,000
Land and land rights	10,350,000
Depreciated cost to company ...	\$147,075,000

By coincidence this result approximates within \$700,000 the result of a staff purge of the original cost claimed by the respondent in the record. Apparently what respondent

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presented was a cost to company base and not original cost. But the significance of the result is that likewise under the company's own theory, total capitalization as of December 31, 1942, is excessive by the difference between \$206,198,000 and \$147,075,000 or \$59,123,000² which deficiency likewise eliminates any consideration of common and a substantial portion of the preferred stocks. It therefore appears that Pennsylvania Power & Light Company by its own tentatively accepted figures of cost to company, with which the majority of this Commission is in accord and FPC disputes as too high, is deficient by 30 per cent in the supporting values of its electric property to its outstanding securities.

A choice must be made in this case between the investor in the "watered" security represented by the corporation on the one hand, and the perpetual contributor to the "watered" security, the ratepayer on the other hand. The majority have chosen to favor the "watered" securities. I choose the ratepayer on the equitable principle that "when one of two innocent persons must suffer, he, whose neglect has caused the loss, must bear it." *Re Ridgway, Budd & Co.* (1850) 15 Pa 177, 182. The security holder had an opportunity first to avoid purchase of the security, second to get rid of it after his purchase. The rule of "caveat emptor" applies. The ratepayer had no chance and will have no chance to avoid the other person's bad bargain unless this Commission acts in his behalf or some Federal body takes jurisdiction if there is such jurisdiction. Moreover the return to

these investors has been ample over the period of the investment.

In summarizing the excessive capitalization of respondent, it is apparent that the financial integrity of Pennsylvania Power & Light is entirely dependent upon earnings and not upon any underlying values of its property, which in itself is good evidence that the rates are excessive. Therefore, it is necessary to approach the rate-making process with the definite knowledge that if earnings are to be based on cost, the capital structure must tumble as surely as a tree with a rotten core.

[Quotation from *Federal Power Commission v. Hope Nat. Gas Co.* (1944) 320 US 591, 88 L ed 333, 51 PUR(NS) 193, 199, 64 S Ct 281, 287, omitted.] The real test is then, are the present rates of P. P. & L. just and reasonable as provided by § 301 of the Public Utility Law.

The majority approach to rate making pursued the old "fair value" method which the court rightly condemned. However, it was fatally defective in supporting evidence. The reproduction cost estimate submitted by the company was completely destroyed under cross-examination. The same result was experienced in the company's evidence as to original cost, the variations of original cost, invested capital, and depreciation. Not only was the cross-examination effective but the clear, concise, and incontrovertible testimony of Commission witnesses, McShea in the temporary rate proceeding, Barclay, Sinatra, Green, Barnes and Curry. These men have performed an exceptional service in the thoroughness with which they have analyzed the mountainous record manufactured by

² Same as footnote (1) on page 42.

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and introduced into the record for respondent not for informative purposes but to conceal and distort the real facts and to confuse the Commission according to the policy laid down in the Murphy letter. I believe now as I did in the recent rate case, *Public Utility Commission v. Elizabethtown Water Co.* Complaint Docket No. 13968 (1944) 57 PUR(NS) —, that since the burden of proof rests upon respondent, if respondent fails to meet that burden, respondent's testimony should be excluded. Nevertheless the majority have found a rate base of \$202,000,000 for total property, electric, gas, and steam equal almost to the dollar the fictitious depreciated original cost rate base claimed by Pennsylvania Power & Light Company. Likewise the rate base is within \$1,000,000 of company's total capitalization of \$203,000,000 as of December 31, 1944. Certainly "fair value" must have been the "end product" in this case as it usually is where that formula is used. The effect of this rate base upon capitalization is to permit at least a six per cent return upon the total thereof. Such return is exactly what respondent's rate of return experts, Coffman and Deubler, claimed but which claim has been ostensibly rejected by the majority.

[Quotation from *Federal Power Commission v. Hope Nat. Gas Co.* *supra*, at p. 200 of 51 PUR(NS) omitted.]

What must be done to balance and just how are the investor and consumer interests to be balanced in this case? Must rates be allowed sufficiently high to support the present capitalization of respondent including the water? No! for that would be balancing the scales

heavily in favor of the investor. Should we allow a rate which will partially support the watered portion of the capitalization? Again the answer is no because the ratepayer is only obligated to support a sound capitalization. Would a company, whose \$7 cumulative preferred stock fluctuates during the year of a war boom between 94½ and 111¼, possess "financial integrity"? Does it exist where the \$6 cumulative preferred stock fluctuates between 90 and 109½ as both did for this company in 1944? Or is that an indication that they are classed as "speculative stocks"? In view of what we know concerning underlying property values—which is no secret—I would say that the public has reacted to that knowledge when coupled with the further knowledge that this rate case would have a favorable conclusion on an earnings basis.

In my opinion the stock is a sub par, speculative stock supported only by excessive earnings and is lacking in the "financial integrity" of which the court speaks in the Hope Case. The financial integrity of any enterprise results fundamentally from a sound capitalization based upon a proper ratio between debt and equity holdings and in addition, the proper ratio of both to the depreciated original cost of property, together with such reasonable earnings thereon that will permit of normal financial and business transactions. *Federal Power Commission v. Hope Nat. Gas Co. supra*. These ratios SEC has standardized at 50 per cent debt, with the balance equally divided between the equity preferred and common stocks with the same ratios of each to depreciated original cost of property. Re Consumers

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Power Co. and Re Commonwealth & Southern Corp. (Dec. 28, 1939) 6 SEC 444, 468, 33 PUR(NS) 321. Of course, an all stock capitalization is preferable but in no event shall total capitalization exceed depreciated cost of property. The answer to the question "What rates will maintain the 'financial integrity' of P. P. & L.?" is to be found in a rate of return which will maintain a capitalization having proper ratios to original cost of property less accrued depreciation. In this case such capitalization on a 100 per cent stock base would approximate \$127,650,000 in plant, plus \$3,350,000 materials and supplies, a total of \$131,000,000.

The dividend experience of respondent over the period between 1923 and 1939, on the ratio of cash dividends paid to average book value of common stock was 21.5 per cent. The ratio of total cash dividends paid to average book value of common stock over the same period was 366.19 per cent. The average book value of common stock was \$14,495,817.69, the cash dividend paid was \$3,122,240.48. From this record with knowledge of a known capital inflation of \$66,000,000, it is indisputable that exorbitant rates have been charged over a corresponding period. Certainly this is not balancing investor and ratepayer interests. It definitely prefers the investor and is a fraud on the ratepayer.

On July 25, 1941, SEC by its notice and order, Re Pennsylvania Power & Light Company and Electric Bond and Share Company, File No. 59-29, advised the respondent companies that it had certain information in its files relative inter alia to "Ratios of debt and senior securities of P. P. & L. to total

capitalization, etc.," appearing particularly in paragraphs 17, 25, 26, and 28 of said notice and order; and further stated:

"It appearing to the Commission that *the present capital structure of Pennsylvania will make impossible the procuring of additional capital by Pennsylvania through public financing consonant within the standards of the Public Utility Holding Company Act, and that continuance of the present dividend policy of Pennsylvania will contravene the public interest* in so far as it will impair the company's ability to meet the National Defense needs set forth above and will otherwise be in contravention of the provisions of the act:"

It was ordered that hearing be held August 12 1941, and further ordered "that upon the convening of the hearing above ordered, *the respondents shall show cause why the Commission shall not forthwith enter an order prohibiting the declaration or payment of further dividends on the common stock of Pennsylvania as violative of § 12 (c) of the Public Utility Holding Company Act of 1935 and rules thereunder:*"

Upon hearing on November 3, 1941, 10 SEC 411, 41 PUR(NS) 36, SEC found it necessary to direct that P. P. & L. "shall not, without further order of the Commission, declare or pay further dividends on its common stock in excess of 25 per cent of the net earnings available for such common stock from and after June 1, 1941;" the effect was to temporarily sustain the allegations of the order for hearing.

I have already stated in footnotes (1) and (2) above, my judgment regarding gas and steam plant but will

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enlarge upon that brief statement. As to gas and steam operations, section II-D of the majority opinion contains an accurate description of the inroads which competition has made upon these two types of services. It was there shown that manufactured gas has fought a losing battle with electricity, and that the convenience which central station steam provides has been matched, and at lower cost, through the development of the residential oil burner and coal stoker. Therefore, regardless of what any rate adjudication based upon legal theories might allow, any increase in the rates for gas and steam heating must result in a further diminution, and ultimately a discontinuance, of consumer demand for these services. In consequence, it is unnecessary to go through any involved rate calculations as to those services, and instead, the present rates and revenues will be considered acceptable for the purposes of this opinion. Depreciated plant values at the most should not exceed the present net income capitalized at 6 per cent. That would be a relatively inconsequential sum here and will not materially affect the return one way or the other.

The majority has allowed for cash working capital and material and supplies in the amount of \$2,854,408 and \$4,135,479, respectively, or a total of \$6,989,887.

This is probably a minor matter in the rate base synthesis, but deserving of some consideration. At all times the company has on hand never less than eleven and one-half months' income tax accrual. The offsetting nature of the postpayment of taxes and its effect on the working capital allow-

ance has been considered by other Commission. *Re Potomac Electric Power Co.* (DC 1944) 55 PUR (NS) 65, 82; see also PUR Digest, Cumulative, "Valuation," § 299.1. Because tax accruals and other reserves are constantly on hand either as cash in bank or in other liquid form, I can see no reason for any additional allowance for cash working capital and would allow only the claim for materials and supplies in the amount of \$3,350,000 which slightly exceeds the allowance in the temporary rate order of 1938, 27 PUR(NS) 174, in this case.

Rate case and original cost expenses are claimed by respondent in an amount approximating \$5,000,000 to be amortized over a 15-year period in annual instalments of \$332,731 for electric and proportionately for the gas and steam-heat properties. On the basis of this record and in utmost fairness, it is reasonable to conclude that the only product of the company's efforts of any real merit relating to all three claims is the inventory of the respondent's property. The appraisals, estimates, and similar matters as shown by this record, E.O.C. 34 and FPC orders were exaggerations beyond belief and entirely worthless to this or any other proceeding involving the subject matter of this claim. Not being able to separate the charge against the inventory from the rest of the fiction, I would disallow the whole claim pending a revision in the light of this discussion.

The next subject for discussion is that of pensions for which respondent shows an expenditure of \$592,776 applicable to electric operations in 1942.

I am of the opinion that present and

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future customers should not be burdened with an expense applicable to prior years and provision for which should have been made by the owners of the utility within their managerial discretion at that time, and accordingly would disallow as an operating expense the difference between \$592,776 of the total electric pension expense and the \$269,608 already found acceptable, or \$323,168 under the belief that it is a proper charge against the stockholder, i. e., against income, but not to the ratepayer, i. e., expense. *Erie v. Mutual Teleph. Co.* (1930) 10 Pa PSC 543, 547, PUR1931A 169; *Taxpayers Protective Asso. v. Lehigh Water Co.* (1935) 14 Pa PSC 67; *Re Rochester Gas & E. Corp.* (NY 1940) 33 PUR(NS) 393, 499; *Department of Public Service v. Pacific Teleph. & Teleg. Co.* (Wash 1940) 34 PUR(NS) 193, 205; *New England Teleph. & Teleg. Co. v. United States* (1943) 52 PUR(NS) 303, 53 F Supp 400.

There is an additional item which was discussed in the temporary rate order of September 28, 1938, that requires at least mention here, management fees, and servicing expenses paid to Ebasco Services, Inc. Since the temporary rate order, much of the criticism of that contract between affiliates has been removed by SEC tentative approval of a revised form of contract between Ebasco and Electric Bond and Share Company's subsidiaries including P. P. & L. But there remains grave doubt in my mind as to the propriety of any such contract arrangement for a company of the size and strength of P. P. & L.

Another item of expense which is mentioned in this record is the cost of

the national advertising campaign conducted in weekly and monthly magazines and by radio, participated in by approximately 160 electric companies, of which P. P. & L. is one. Probably not one of the sponsoring companies could have any substantial excess capacity to contribute to any venture which might seek location in its territory at this time. The cost of the advertising is apportioned on the basis of the number of customers of each sponsoring company and is charged to expense, that is, to the same customer who could in no way possibly benefit by the expenditure. It should be disallowed.

Summarizing this entire matter for the purpose of determining the just and reasonable rates of respondent, I would find:

1. A declared policy on the part of the Electric Bond & Share system, including Pennsylvania Power & Light Company, to circumvent and defeat effective regulation of respondent's rates and security transactions by the Pennsylvania Commission.

2. That this declared policy was carried into effect in this proceeding such that there is little of probative value in the record.

3. That best evidence of original cost of respondent's property is available in Commission's files at EOC No. 34 and that Federal Power Commission as well as this Commission have at least tentatively agreed thereon at \$144,776,435.22 as of December 31, 1937, and which I find has increased to \$166,750,000 at December 31, 1942.

4. That "cost to company" has been tentatively agreed upon at \$170,650,000 at December 31, 1937, and I find

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that it does not exceed \$192,650,000 at December 31, 1942.

5. That the depreciated original cost and the depreciated "cost to company" are, respectively, at December 31, 1942, \$127,650,000 and \$147,000,000.

6. That the securities outstanding total:

As of December 31, 1942 \$206,198,256
And as of December 31, 1944 ... \$203,620,328

7. That the capitalization as related to depreciated original cost and to depreciated "cost to company" is excessive as of December 31, 1942, as follows:

Original Cost—
\$206,200,000—\$127,650,000=\$78,550,000
Cost to Company—
\$206,200,000—\$147,000,000=\$59,200,000

and respondent is, therefore, lacking in financial integrity.

8. That the majority rate base is equivalent to approval of the present capitalization of respondent including its obvious inflation and permits a return of 6 per cent on that inflation at expense of ratepayer.

9. That on the basis of wide market

fluctuations, the preferred stocks are not sound investment securities but are speculative and without underlying value, giving conclusive evidence of lack of financial integrity in the capital structure.

10. That the ratios of classes of securities to each other and to property are grossly improper.

11. That the dividend experience of respondent has favored the investor and harmed the ratepayer by (a) being excessive under any circumstances (b) being paid on a gross overcapitalization wherein both common and preferred are lacking in supporting property values.

12. That the present capital structure would prevent procurement of additional capital and, therefore, the company lacks financial integrity.

13. That rates based upon an amount equivalent to the present total capitalization of the respondent prefer the investor over the ratepayer and they are unjust and unreasonable.

The result of these findings reduced to tabular form would be as follows:

Comparison of \$131,000,000 and \$151,000,010 Rate Bases as of December 31, 1942

	Electric	
	Original Cost	Cost to Company
Rate Base	\$131,000,000	\$151,000,000
Operating expenses	20,783,571	20,783,571
Disallowed expenses	655,899	655,899
Allowed expenses	20,127,672	20,127,672
Annual depreciation	2,600,000	2,600,000
Taxes	3,778,441	4,661,774
Total allowed expenses	26,506,113	27,389,446
Allowed return @ 6% on \$151,000,000	7,860,000	9,060,000
Allowed revenues	34,366,113	36,449,446
Actual revenues	43,672,328	43,672,328
Rate reduction	\$9,306,215	\$7,222,882
Percentage of required decrease in rates	21.309	16.539

I don't pretend that my calculations operating charge at the ratepayers' expense as the majority has done.

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to present two views, the company's and mine, based on real facts, not on fiction. To do so I have gone outside of the record for supporting data in this opinion. But the sources of those data have all been public records in which the respondent was a party and had notice and an opportunity to defend. Some of the results of my calculations have been remarkably close to some things the company has produced for the record after some purging by the Commission staff, but they carry different designations to reflect our respective judgments—respondent's and mine—as to the true nature of them, such as original cost and cost to company. Those matters of record as adjusted by the staff corroborate my efforts which I believe do justice to both sides of the controversy—the investor and the consumer—and favors neither.

I believe that Pennsylvania Power & Light Company should reduce its revenues by not less than \$7,500,000 on the basis of 1942 earnings to be reflected in rate reductions aggregating at least that amount.

There are two matters in the majority order which I believe should be mentioned. In order to build up the electric rate base to a point where it alone would support debt requirements, plus preferred stock fixed charges, plus dividends on capital stock, the majority literally threw everything into the "fair value" hopper to accomplish that end.

Cost of financing in the majority's reproduction cost estimate included cost of financing of *preferred stock*. Preferred stocks are common stocks preferred only as to certain items such specifically reserved in the stock; they

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represent equity in the enterprise and take part in the management thereof and they are in no sense debt but rank in a forced liquidation with other equity securities. The majority conclusion is contrary to every decision that can be found. *Solar Electric Co. v. Public Utility Commission* (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9A(2d) 447; *Utah Power & Light Co. v. Public Service Commission* (1944) — Utah —, 56 PUR(NS) 136, 152 P(2d) 542.

The allowance of excess profits tax as an operating expense is a more controversial subject. Apparently what the majority has done is to set, as its goal, a return from electric operations sufficient to pay its annual debt requirements, its preferred stock requirements, and, finally, dividends on the common stock. To make this payment the company must have revenues sufficiently high not only to pay the return but likewise the excess profits tax which necessarily follows. Therefore the process figures backwards from the desired net income, which in this case is approximately \$13,337,000.

In order to get \$1,900,000 additional revenue to reach this goal, it is necessary to obtain \$9,360,000 additional revenue because being already in the excess profits bracket, excess profits taxes must be considered in determining the additional revenue required to result in the desired net after taxes. The difference of \$7,460,000 between the two figures is the amount of the additional excess profits taxes required. What a different story would be told if excess profits taxes were charged against net income at the stockholders' expense instead of as an

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There is no payment of excess profits tax necessary under my computation. I am firmly of the opinion, however, that such taxes are properly a charge against income and not an expense and that seems to be the overwhelming trend of utility regulation at this time. Arizona Public Service Commission, Docket No. 9575-E-974, Decision No. 15068, Oct. 9, 1944; Detroit v. Public Service Commission (1944) 308 Mich 706, 54 PUR(NS) 65, 14 NW(2d) 784; Public Service Commission v. Springfield Gas & E. Co. (Mo 1944) 53 PUR(NS) 95, 105, 106; Detroit v. Panhandle Eastern Pipe Line Co. (Fed PC 1942) 45 PUR(NS) 203; Alabama Public Service Commission v. Alabama Power Co. The California Commission has disallowed excess profits taxes. Dr. Clyde Olin Fisher, chairman of the Connecticut Commission, read a paper supporting the above thought before the National Association of Railroad and Utilities Commissioners' Convention in 1943.

The method of allowing excess profits tax adopted by the majority has this effect upon the company and upon the ratepayer. It builds up an overwhelming tax requirement solely at the expense of the ratepayer or customer in consequence of which shows on the surface a deficiency in the allowable return to P. P. & L. Applying the principle declared in Public Utility Commission v. Elizabethtown Water Co. *supra*, the company is privileged, practically invited, to *file increased rates within its own discretion*, which increases could possibly reach 21.4 per cent of 1942 revenues—about 17 per cent increase on account of taxes alone, and the balance 4.4 per cent for addi-

tional return. That the company need not do this is obvious. If revenues are not increased through new tariff filings, the excess profits taxes will not attach in their entirety and the difference will go into surplus and thus to the stockholder. So the real inequity of the majority order may be that it is camouflage to maintain the status quo. The present rates are adequately supporting the "water" in P. P. & L. capitalization. Under the Commission order, the company has a choice of accepting, first, present conditions as they are, or, second, of filing some increased rates such as in the controversial Lancaster area, or, third, filing a general increase. Definitely there will not be a decrease, which decrease I believe I have demonstrated is necessary if equity to the customer has anything to do with the proceeding.

As a bit of philosophy to an already drab exposition of a practical ratemaking process, the results of the Commission's action might be mentioned. I don't mean the result upon revenues because they have jumped from \$43,000,000 in 1942 to over \$50,000,000 in 1944 which is due mostly to the war effort, but upon the fact that electricity is definitely a necessity, both residentially and industrially, with a tremendous future.

Pennsylvania Power & Light Company serves all or parts of 28 counties in central and northeastern Pennsylvania. [List of counties omitted.] It serves practically all of the anthracite or "hard coal" region. The entire territory has wonderful possibilities for greater development in both residential and industrial spheres. But

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will it under conditions such as this order creates?

In a report published by Federal Power Commission under date of June, 1944, entitled "Typical Electric Bills" on page 4 appears a comparative table on cities of 50,000 population or more ranked from low to high on size of bills for residential service. There is a total of 214 public utilities reported covering the entire country. To Pennsylvania's shame, by way of regulation of public utilities in the public interest, one city, Johnstown, is ranked at the bottom, No. 214, for rates on 25 kilowatt-hour consumption. That means that Pennsylvania Electric Company which serves that area has the highest rate in the country of the 214 utilities reporting in that bracket. The area serviced by Pennsylvania Power & Light Company ranks as follows: 25 kilowatt hours, No. 178; 100 kilowatt hours, No. 193; 250 kilowatt hours, No. 180. How can the commonwealth of Pennsylvania progress under such restraining, backward conditions? Pennsylvania is at the bottom of the list in one instance and, in the matter before us, is ranked as low as 193 out of 214 and its best effort is No. 178 out of 214.

Pennsylvania at one time was well on its way toward effective regulation in the public interest when in 1938 out of this same "hard coal" region came a chief executive of the commonwealth pledged on the political platform to destroy the laws of 1937 and to return the commonwealth to the "free enterprise" of former days. He was not elected because of those promises, in my opinion, but in spite of them.

57 PUR(NS)

However, he believed otherwise and put his belief to work. What he did not accomplish has been done by the courts as in the instance of the Public Utility Law where political and economic theories of judges have reversed the will of the legislature.

This Commission has support for its conclusion in this case through the decision of the superior court in *Peoples Nat. Gas Co. v. Public Utility Commission* (1943) 153 Pa Super Ct 475, 51 PUR(NS) 129, 34 A(2d) 375. But no appeal was ever taken from that decision by the Commission which weakens that support and furthermore the judge, who wrote the majority opinion, himself a former counsel for large utilities, has since retired from the bench after a very brief stay. Hence I would put small reliance upon the shelter provided by that case.

Now the hustings are filled with talk about cleaning up rivers and streams and postwar this and postwar that—pretty talk and good politics. I am in favor of most of the postwar planning ideas if they are carried out in the public interest. But what about the immediate problems facing us likewise affecting the public interest. Why cannot the public interest displayed toward cleaning up the pollution in our rivers and streams be first manifested by cleaning up pollution in the utility field? Both will do the commonwealth a lot of good. This case could have made a wonderful start in that direction. Perhaps "power" politics will not permit the power of the Pennsylvania Electric League and the Pennsylvania Natural Gas Men's Association.

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PFEIFLE v. PENNSYLVANIA POWER & LIGHT CO.

MORGAL, Commissioner, dissenting: I dissent from the findings of the majority upon two major points, namely, the determination of the rate base and income taxes.

Rate Base

It is apparent from the summarization of rate base elements set forth in the tables in sections I-G and II-G, that the majority, in reaching its determination as to the rate base, excluded from consideration every element of plant value other than depreciated reproduction cost based upon spot prices.

I do not believe that the Commission is required as a matter of law to base its finding on this element of value to the exclusion of all other elements, nor do I consider it economically sound.

The two most recent Pennsylvania court decisions on the subject are those of the superior court in the Peoples Natural Gas Company Case (1943) 153 Pa Super Ct 475, 51 PUR(NS) 129, 134, 34 A(2d) 375, and the Philadelphia Transportation Company Case (1944) 155 Pa Super Ct 9, 55 PUR(NS) 473, 37 A(2d) 138. In the former case the court said:

" . . . by 1926, the Supreme Court of the United States had virtually committed itself to reproduction cost at current prices as, in effect, the dominant basis of value *under ordinary circumstances and reasonably stable prices*. McCardle v. Indianapolis Water Co. 272 US 400, 412, 71 L ed 316, PUR1927A 15, 47 S Ct 144. The court intimated that, if prices were not reasonably stable, that is, if they were inordinately high or low and might reasonably be expected

to change in the near *future*, the prospective change could be taken into consideration or an average of costs over a period of years taken. . . . (Italics by the court.)

"As late as 1939, this court pointed out that in an unbroken line of decisions of our supreme court and this court, 'the cost of reproducing the property has consistently been held to be not only a relevant, but also an essential element in the ascertainment of its "fair value" for rate-making purposes.' . . .

"This does not mean that in every case depreciated reproduction cost is, under our decisions, identical with present value. We have said, it is not. . . . In determining what is, from the facts of a particular case, the best evidence of present value, the Commission and this court is under a duty to exercise an intelligent and discriminating judgment. But since the test is one of reason, the weight to which a particular element is entitled in a given situation will vary.

"It is a fact of considerable importance that most of the decisions of our own appellate courts, and, for that matter, of the Supreme Court of the United States, establishing the elements of fair value for rate-making purposes were rendered before our legislature adopted the Public Utility Law of 1937 and wrote 'fair value' into § 311, 66 PS § 1151, and that standard, minus a detailed list of the elements constituting fair value, was carried over from the Public Service Act of 1913 (Act of July 25, 1913, P.L. 1374 Art V, § 20)."

Article V, § 20 of The Public Service Company Law above referred to, provides that: [Statute omitted.]

PENNSYLVANIA PUBLIC UTILITY COMMISSION

In the Philadelphia Transportation Company Case, *supra*, the court after accepting the Commission's depreciated reproduction cost of \$98,276,000, and adding to it \$6,049,000 of other items—a total of \$104,325,000—fixed the rate base at \$93,000,000.

Thus, neither by its enunciation of principles, nor by its action, has the superior court found depreciated reproduction cost at spot prices to be synonymous with the rate base. To find that present cost levels represent the sole measure of plant value, would seem to me to also require acceptance of the proposition that the rate of return should be identical with the present cost of money, which today is approximately 3 per cent.

But wholly aside from the law, the use of any one element of value as the sole measure of the rate base is economically unsound. As I perceive it, the function of a regulatory Commission is to fix rates at such a level that, on the one hand, the public is encouraged to use the service to the maximum extent and, on the other, that investors are not discouraged from putting their money into the plant and equipment required to render that service. Just where this point lies, as the superior court pointed out in the Peoples Natural Gas Case, *supra*, is a matter of "intelligent and discriminating judgment."

Certainly, to use original cost as the rate base, during a period of high prices, would be to discourage the investor for the present and make him distrustful of the future. With equal certainty, I believe it may be said that the use of reproduction cost as of a date when unit prices are—to use the language of the court—"inordinately

high," with a decline in prices in prospect, can only result in the discouragement of the use of service as soon as the decline in prices (and hence in wages) becomes a reality. No court or Commission can stay the operation of economic law.

Because the factors affecting economics vary not only as between utilities but also from time to time, I believe that a fair rate base invariably lies below the highest element of value and above the lowest one, and that the intermediary point at which it belongs, depends upon many factors which are unique for each case. Since the majority's findings do not accord with the principles I have stated, I dissent from those findings.

The foregoing statements apply to the general rate case principles involved and the elements to be considered in the determination of the rate base. Specifically I also disagree with the finding of the majority as to the items of accrued depreciation and the cost of financing.

As was stated by the majority, the testimony offered by both sides in support of their views on the matter of accrued depreciation, was unreliable, so that the finding is necessarily a judgment figure. But certain facts of record, not offered in direct support of either party's contentions, can be utilized to inform our judgment. First, is the unusually small amount charged to the depreciation reserve to cover the retirements during the last five years, as compared with other years of respondent's history. This experience parallels that of most other public utilities, and is due, of course, to the scarcity of men and materials for making replacements, on the one

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hand, and the tremendous increase in demands for electric service on the other. In other words, respondent's plant undoubtedly includes many items that should, and normally would, be replaced, because much of its depreciable plant is being worn out more rapidly than in ordinary times. These are factors tending toward a high accrued depreciation as the Commission said in its Statement of Policy, dated June 8, 1943, 50 PUR(NS) 17, with regard to earnings during the war emergency.

Another factor which should be given consideration in forming a judgment with regard to accrued depreciation is the characteristics of respondent's electric generating plants. A few of its larger generating plants are modern and efficient, but respondent also owns some old and relatively inefficient plants, which until the advent of the war, were held in "cold reserve" that is, usually in a nonoperating status. It appears that at least some of the older plants in this category will be retired in the not-too-distant future, and accordingly the accrued depreciation applicable to them should be fairly high, and generating stations being a substantial item in total plant value, their early retirement should have an appreciable effect upon the over-all percentage for accrued depreciation.

These facts, together with experience of other large electric companies operating in Pennsylvania, lead me to the conclusion that the majority's finding as to accrued depreciation of electric plant is too low.

I agree with the majority's discussion preceding the findings as to accrued depreciation of gas and steam-heat plants, but I would give the sub-

stance of the discussion more weight in reaching a conclusion as to the over-all percentages allowed for accrued depreciation.

In its allowance for cost of financing as an item of reproduction cost, the majority includes the cost of financing applicable to preferred stock for the reason that "the characteristics of the preferred stock are more nearly those of a 'bond indenture or like security' than of common stock," the cost of financing having been allowed on bonds and disallowed on common stock by the appellate court in the Solar Electric Company Case (1939) 137 Pa Super Ct 325, 31 PUR(NS) 275, 9 A(2d) 447, and in the Cheltenham & Abington Sewerage Case (1936) 122 Pa Super Ct 252, 15 PUR(NS) 99, 186 Atl 149.

I do not agree with conclusions of the majority in this respect. While the respondent's preferred stock does resemble indebtedness in that the dividend rate and its share in the assets are limited to specific amounts and precede the common stock in priority, in all other characteristics, the resemblance is closer to common stock. The preferred stock has no lien, either general or specific, upon the company's assets; it is not entitled to dividends unless the directors see fit to declare them, and it has voting power, identical with that of the common stock. Historically also, the concept of preferred stock arose out of a division of the equity in a corporation, whereby some of the stockholders subordinated their claims to those of others. I therefore dissent from the majority's finding that the cost of financing applicable to preferred stock is includable as an item of reproduction cost.

PENNSYLVANIA PUBLIC UTILITY COMMISSION

Income Taxes

According to its own figures, respondent made an operating profit of \$11,008,383 in 1942, after payment of all operating expenses, including income taxes—an amount sufficient to pay all of its bond interest, the full dividend requirements upon its preferred stocks and 8.4 per cent on the stated value of its common stock.

The majority finds allowable earnings of \$13,337,650—an increase of \$2,329,267 over the actual earnings for 1942. But the majority also finds \$14,008,630 of allowable state and Federal income taxes—an increase of \$8,981,971 over the 1942 tax returns which respondent actually made to state and Federal authorities. All of this tax increase, except for about one million dollars applicable to a non-recurring credit, is necessary to provide the increase in earnings which the majority order finds allowable. Stated differently, the majority order finds an increase in allowable revenues of about \$9,300,000 to produce only \$2,329,267 of increased operating profit to respondent.

Practically all of this additional tax allowance is attributable to the Federal excess profits tax. I believe that this tax is unjust, discriminatory, and uneconomic, but since it is the law of the land, every utility whose income falls within its scope must pay the tax. That being so, if the income produced by present rates is such as to result in an excess profits tax, to that extent, I believe this tax is allowable, at least so long as our Statement of Policy of June 8, 1943, *supra*, is effective. But if a company is already within the excess profits bracket, any rise in rates designed to produce additional return must necessarily involve the extreme ratios contained in the excess profits tax law, and consequently prove of little value to the company and of decided disadvantage to the consumers. I am of the opinion that when the facts show that a public utility is already able to pay its interest and reasonable dividends under existing rates, no increase in excess profits tax allowances should be authorized for rate-making purposes.

CALIFORNIA RAILROAD COMMISSION

Re Pacific Gas & Electric Company

Decision No. 37324, Case No. 4735
September 13, 1944

INVESTIGATION upon Commission motion into propriety and reasonableness of proposed service extension rules; suspension of rules vacated.

Service, § 188 — Extension rules — Burden of cost.

1. Service extension rules doubling the free footage allowances now in force and further liberalizing the length of line and equipment that the

RE PACIFIC GAS & ELECTRIC COMPANY

utility will install without advances from new applicants should be authorized if applied uniformly to all who ask for service without undue discrimination or preference to other users of the service, since it is in the public interest to make electric service available to as many rural dwellers and agriculturists as possible, p. 59.

Service, § 190 — Extension rules — Burden of cost.

2. A service extension rule waiving deposit requirements for all electric line extensions having an estimated total cost including transformer services and meters not exceeding fifteen times the estimated gross annual electric revenue to be derived therefrom by the company should be construed so that any advance required will be computed after the full free footage has been applied on a 15 to 1 basis, since any other construction would not result in full equality of treatment, p. 60.

APPEARANCES: R. W. DuVal, for applicant; J. J. Deuel, for California Farm Bureau Federation; H. G. Dillon, for San Diego Gas and Electric Company; John J. O'Toole, Dion R. Holm, and Paul L. Beck, by Paul L. Beck, for the city of San Francisco; Louis Bartlett, for Foothill Electric Association, Incorporated, and Redwood Electric Co-operative, Incorporated.

HAVENNER, Commissioner: This is an investigation on the Commission's own motion into the propriety and the reasonableness of certain proposed revised and new rules and regulations on electric line extensions submitted for filing by the Pacific Gas and Electric Company under Advice No. 6-E on July 6, 1944.

The order of suspension and investigation was issued July 28th and public hearings were held in the Com-

mission's courtroom at San Francisco on Monday, August 7th, and on Wednesday, August 9th, at which time and place evidence was taken and the matter submitted for decision on briefs to be filed within ten and twenty days, respectively. On August 19th a brief was filed by the Foothill Electric Association, Inc. A reply brief was submitted on August 29th by respondent utility.

The rules and regulations in suspension are two in number, namely; Rules and Regulations No. 15—Line Extensions, and No. 15-A (Special and Temporary) Line Extensions.

It may be stated that electric line extension rules set forth the conditions under which a utility will extend its lines to connect up new applicants for electric service in rural areas. One important part of such rules deals with how far a utility will extend its lines at its own expense.¹

¹ "Rule and Regulation No. 15 . . .
"(B) Free Extension in Rural Territory:
"1. The company will construct, without cost to such applicants except as hereinafter provided, the following lengths of line in rural territory:

For each lighting customer	100 feet
For each refrigerator installation	75 feet
For each kw. of connected heating and/or cooking load	75 feet

For each hp. of connected power load in installations aggregating less than 5 hp.	75 feet
For each hp. of connected power load in installations aggregating 5 hp. or over	100 feet

"2. The company will also furnish, install and maintain the necessary transformers, meters and service wires without cost to such applicants. The wires between the company's

CALIFORNIA RAILROAD COMMISSION

The July 6th filing, made by the respondent utility and now under suspension, would under Rule No. 15 exactly double the free footage allowances now in force in the presently effective rule. In addition, it is proposed under a new Special and Temporary Rule No. 15-A to further liberalize the length of line and equipment that the utility will install without advances from new applicants of service. In this respect § 1 provides:

"1. Section (C) of Rule and Regulation No. 15—Electric—, requiring applicants in rural territory to advance 25 cents for each foot in excess of the free length extension therein specified, is, during the term hereof, waived for all electric line extensions having an estimated total cost, including transformers, services, and meters, not exceeding fifteen times the estimated gross annual electric revenue to be derived therefrom by company."

The last-named rule, as submitted for filing, would expire on January 1, 1946.

The respondent utility, through its witness N. R. Sutherland, who is the company's commercial manager, outlined quite fully the reasons which prompted his company to make the aforesaid changes in its extension rule. Briefly the record shows that this is

all part of a comprehensive program of war and postwar planning, to extend electric service to practically all presently unserved rural sections of the service area of the Pacific Gas and Electric Company. More specifically the program is expected to (a) increase growth of food crops during this war period; (b) provide work for returning soldier-employees; and (c) stimulate a still greater market for electric service and thus, in part, help fill the gap from loss in war production loads, as well as to create additional employment in the manufacture of electrical appliances to fill the new consumer requirements.

The program planned is very extensive and will cover the entire service area of the company. Based upon field surveys, witness Sutherland stated there were involved approximately 759 extensions to be built that will serve 5,069 new customers, calling for an estimated investment by his company of nearly three and a half million dollars, with an expected annual revenue of over half a million dollars.

It was further developed that the respondent utility was ready and willing, when authorized, to apply the more liberal extension policy to its so-called Paskenta special rate area

last pole and the customer's facilities or premises are for this purpose called service wires.

"3. The length of line required for an extension will be considered as the distance from the nearest distribution pole and along the shortest practical route (to be determined by the company) to the point where connection is made to the company's service wires. Any change in or addition to the existing distribution facilities of the company will not be considered as a part of the extension except in unusual cases.

"(C) Rural Extension beyond Free Length:

"1. Extension of lines in rural territory of a length greater than provided under § B-1

above, will be built, owned, and maintained by the company, provided the applicant (or applicants) for service advances to the company 25 cents for each foot in excess of the free length specified in § B-1.

"2. The amount advanced hereunder will be subject to refund, without interest, as provided for in § D, provided, however, no repayments will be made by the company in excess of the amount advanced by the applicant (or applicants), and, further provided, that no repayments will be made by the company after a period of ten years from the date the extension on which the advance is made is completed. . . ." (Proposed Rule No. 15.)

RE PACIFIC GAS & ELECTRIC COMPANY

that now carries surcharge rates because revenues did not justify the full investment in the electric line under the extension rule² when built, nor has the revenue improved sufficiently to remove the surcharge on the basis of the rule now in effect.

At the hearing the Redwood Electric Co-operative, Inc., and the Foothill Electric Association, Inc.,³ through their attorney, Louis Bartlett, sharply protested the filing of the aforesaid extension rules and sought a permanent suspension and/or a limited application of said rules so they would not apply in areas in which coöperatives have been organized for the purpose of distributing electric energy. It was contended by counsel for the coöperatives, though no testimony was offered, that the Pacific Gas and Electric Company's purpose in liberalizing its extension policy was ". . . principally for knocking out these two coöperatives in California, preventing them from going ahead and serving the public in their areas . . ."

R. W. DuVal, attorney for respondent, strongly refuted any such allegation, pointing to witness Sutherland's testimony, as well as to his company's unquestioned legal right to construct extensions of its electric system into all areas in northern and central California, as provided under § 50 of the Public Utilities Act. He asserted that it is not only his company's right

but its legal obligation to extend its lines and render service to all who may apply in accordance with established principles. It was further pointed out that authorization of the proposed extension rules would in no manner obligate any coöperative member or any one else to take service from respondent utility, but it would make it possible to have line extensions built in marginal unserved pockets and sections of territory not now fully served to the distinct benefit of those people.

J. J. Deuel, of the California Farm Bureau Federation, stated that he was taking no part in any dispute between protestants and the utility, but that his organization was exerting every effort to secure electric service for the unserved farmers of this state. He stressed the point that a large majority of the extensions to be built would each serve but a few customers; and testified that he had in his files requests for service that showed 402 extensions with only one customer each and no extension with more than 48 prospective customers. It was his opinion that the only opportunity for these scattered people to receive electric service is from the respondent utility, as no separate and independent distributing agency could exist on such isolated and limited loads.

[1] It is unquestionably in the public interest to make electric service available to as many rural dwellers and

² This is the only surcharge rate area on the system of the Pacific Gas and Electric Company and it was authorized under Decisions Nos. 31907, ([1939] 28 PUR(NS) 307), 33572, 33620, and 34734, ([1941] 42 PUR(NS) 13), in order that the then unserved area (Tehama, Glen, and Colusa counties) might have electric service without

creating undue burdens on the balance of the system.

³ The record shows that while each of the coöperatives are said to have secured financial allotments for the construction of distribution facilities through the Rural Electric Administration, yet neither one has any plant or electric lines and no electric service is rendered to anyone.

CALIFORNIA RAILROAD COMMISSION

agriculturists as possible. California utilities have, generally speaking, done a good job so far, as this state stands near the top in the nation as to the percentage of farms receiving central station service. In 1925 this Commission permitted a temporary liberalization of this utility's footage rules and during this period extensions were made to serve more than 3,900 new farm customers. In subsequent periods the Commission's general order on standards for overhead line construction was modified so as to reduce costs of construction (consistent with safety) and these economies resulted in more free footage lines.

It is unfortunate, however, that large areas, such as the two coöperatives propose to serve, should have been left without electric service until the present time. The plan now presented by this utility is designed to extend service at reasonable cost into these hitherto neglected areas. If this plan can be applied uniformly to all who ask for service, without undue discrimination or preference to other users of the service, there would seem to be no question but that it will be in the public interest and should be authorized.

The record shows that while the doubling of the old free footage under proposed Rule No. 15 may require some refinements in the future, it is generally in line with similar allowances now in effect in the service areas of other utilities. The respondent utility has attempted to avoid any preference or discrimination in carrying out

the more liberal provisions of proposed Rule No. 15-A, by submitting at time of filing a stipulation that any deficiency in earnings that may result from making extensions under proposed Rule No. 15-A as compared to Rule No. 15, will not be borne by its other electric consumers.⁴

[2] In connection with the more liberal terms of proposed Rule No. 15-A, as compared to Rule No. 15, it developed at the hearing that the utility's witness interpreted Rule No. 15-A in such a manner that any extension to be built, having an investment-revenue relationship in excess of 15 to 1, would be required to make an advance not on the basis of Rule No. 15-A but in accordance with Rule No. 15. Such treatment would not accord the less fortunate applicant the same free footage as the more fortunate one who would receive service over an extension built without an advance. Therefore, Rule 15-A should be construed and applied in such manner that any advance required will be computed after the full free footage has been applied on a 15 to 1 basis. Any other construction or application of the rule will not result in full equality of treatment.

Having in mind that the expiration date on Rule and Regulation No. 15-A will be extended by respondent beyond January 1, 1946, if necessary, in order to complete its over-all extension program, it is my view that the suspension should be lifted and Rules and Regulations Nos. 15 and 15-A be permitted to become effective.

⁴ As one measure of such deficiency we interpret this to mean the difference in gross revenue that would have been required under Rule and Regulation No. 15 and that ob-

tained under Rule and Regulation No. 15-A. It is further understood that records will be kept as to investment and gross revenues in extensions made under Rule No. 15-A.

RE STANDARD TELEPHONE & TELEGRAPH CO.

ALABAMA PUBLIC SERVICE COMMISSION

Re Standard Telephone & Telegraph
Company

Non-Docket 1407, Sub. A
December 28, 1944

MATTER of refund to telephone subscribers because of excess earnings; refund ordered.

Reparation, § 15 — Refund to subscribers — Excess earnings.

A telephone company under investigation by the Commission was ordered to deposit in a special fund excess earnings for the past year and to refund from such fund to each subscriber an amount equal to 20 per cent of the aggregate of amounts billed monthly to such subscriber for local exchange service during the year, upon a finding that this would be proper in view of earnings during the year, and the company being agreeable to the refund.

By the COMMISSION: On January 24, 1944, the Commission issued its order in its Non-Docket 1407, revising certain of the exchange rates of the Standard Telephone and Telegraph Company by (1) the elimination of the differential in monthly charges based on time of payment of bills, (2) the elimination of the extra monthly charge for use of hand-set telephones, and (3) the reduction in extra mileage charge for exchange service rendered subscribers located outside of base rate areas.

Subsequent to the entry of the above-mentioned order the Commission has continued its investigation of the rates and business of said company, and a reasonably accurate estimate of the current operating earnings for the year 1944, now being available, the Commission has examined same and is of the opinion that the gross earnings of the company for

said period are in such an amount that it would be fair and proper that a portion of same be refunded by the company to the exchange subscribers as hereinafter set out, and such refund being agreeable to the said company; now, therefore,

The premises considered,

It is *ordered* by the Commission, as follows:

(1) That the Standard Telephone and Telegraph Company shall forthwith set aside and deposit from its current operating revenues for 1944, in a special account, separate and apart from other funds, the sum of \$39,000, being the amount estimated to be necessary for making the refunds hereinafter ordered.

(2) That from said special fund, so set aside and deposited, there shall be refunded by Standard Telephone and Telegraph Company to each subscriber receiving local exchange tele-

ALABAMA PUBLIC SERVICE COMMISSION

phone service during the year 1944, as shown by the books of the company, an amount equal to 20 per centum of the aggregate of the amounts billed monthly to such subscriber for local exchange telephone service rendered during the year 1944.

(3) That said refunds shall be made and completed not later than February 28, 1945, and within thirty days after said date the said company

shall make to the Commission, detailed report of its action in the premises.

Jurisdiction in this cause is hereby retained for such further order or orders as the Commission finds just, reasonable, and necessary.

EDITOR'S NOTE. The same action was taken in *Re Andalusia Teleph. Co.* (Ala) Non-Docket 1408, Sub. A, Dec. 28, 1944, the amount of the fund being fixed at \$6,000.

NEW YORK PUBLIC SERVICE COMMISSION

Re Rochester Gas & Electric Corporation

Case No. 11203
December 28, 1944

PROCEEDING relating to approval of reduction of capital and retirement of securities; approval order amended to authorize payment of expenses in excess of original estimate.

Security issues, § 115 — Expenses of redemption — Reasonableness.

Expenses incurred by a public utility corporation in the redemption of its preferred stock and redemption of its capital stock, covering printing and mailing, legal services, bank compensation and expenses, and miscellaneous expense, should be approved when shown to be proper and reasonable although in excess of an estimated amount approved upon authorization for retirement of the securities.

BURRITT, Commissioner: Upon petition of May 19, 1943, and after hearing, the Commission adopted an order on June 22, 1943, giving its consent and approval to the use by Rochester Gas and Electric Corporation of revenues received from the rendition of public service within this state for the purpose of purchasing 27,000 shares of its series C, 6 per cent cumulative preferred stock, and 11,871 shares of its series D, 6 per cent cu-

mulative preferred stock at 105 per cent of par and accrued dividends; and to a reduction in the capital of the Rochester Gas and Electric Corporation as provided in a certificate dated May 19, 1943, filed with the Commission. Clause 1 of the order of June 22, 1943, provided that the payment of expenses in connection with the redemption and reduction of capital should not exceed \$6,500.

RE ROCHESTER GAS & ELECTRIC CORP.

On November 21, 1944, there was received from the Rochester Gas and Electric Corporation a petition setting forth the expenses alleged to have been actually incurred in the above redemption of preferred stock and reduction of capital stock, and requesting that Ordering Clause 1 of the order made on June 22, 1943, be amended so as to give consent and approval for the payment of expenses aggregating \$10,704.85.

In accordance with the provisions of the order, the Rochester Corporation, by letter dated July 1, 1943, submitted journal entries which it proposed to make upon its books to reflect the acquisition of outstanding preferred stocks authorized to be redeemed and the disposition of expenses in connection therewith. These expenses have been examined by the accounting division and a preliminary report dated September 28, 1943, has been made to the director of accounting but not yet submitted to the Commission. The expenses submitted then aggregated \$7,323.78. The company proposes to debit all expenses to surplus.

In the following table there is set forth an estimate made by petitioner at the hearing on May 26, 1944, of the anticipated cost of the redemption and, in comparison, the cost now alleged by the company to have been incurred:

	As estimated in June	Reported Expenditures
Printing and mailing .	\$3,500	\$4,265.42
Legal services	2,500	2,430.00
Bank compensation and expenses	None	3,381.07
Miscellaneous	500	628.36
Total	\$6,500	\$10,704.85

The actual expenditures as reported

by the company for printing and advertising, are as follows:

Case-Hoyt Corp. printing letters of transmittal and notices of redemption of series C & D preferred stock	\$140.50
Advertising—Herald Tribune (New York)	2,432.00
" —Wall Street Journal (New York)	1,376.25
" —Democrat & Chronicle (Rochester, N. Y.)	316.67
	<u>\$4,265.42</u>

The certificate of reduction of capital as filed with the secretary of state provides (subdivision 10 of par. 6) for the "publication of such notice of redemption once a week for four successive weeks in two newspapers of general circulation published in the city of New York and in one newspaper published in the city of Rochester." I am advised that such advertising on redemption is also required by the company's charter.

It will be noted that the total for printing and advertising exceeds the original estimate by \$765.42. The company admits that its estimate was too low but claims that this is partially due to increased costs of labor and space rates. The advertising appears to have been required by the certificate and to be proper expenses in connection with the proceeding. The cost of printing the letters of transmittal and notices of redemption of the stock does not appear to be unreasonable.

The costs of legal service of \$2,430 as reported in the petition of November 20th appear to be slightly below estimates. These consist of \$2,000 paid to Goodwin, Nixon, Hargrave, Middleton & Devans and \$430 for services paid to Naylon, Aronson & Foster.

NEW YORK PUBLIC SERVICE COMMISSION

The company states in its petition that in arriving at its estimate of expenditures, through oversight it neglected to include therein an item to cover compensation for services and disbursements of the Lincoln Alliance Bank & Trust Company of Rochester, which was its agent in the redemption of certificates. The services performed by this bank in connection with the redemption of preferred stock are said to include conferences with respect to procedure, the drawing by lot of certificates, mailing of notices, the acceptance of the redeemed certificates, and the payment of the redemption price. Of the total of \$3,381.07, \$93.57 is for disbursements. The charges of the bank for services were made up as follows: There were 1,381 series C stockholders, for which the bank charged \$1.50 per stockholder, or \$2,071.50; and 608 series D stockholders for which a charge of \$2 per stockholder, or \$1,216 was made. The charge per stockholder in connection with the series D stock was greater than the charge per stockholder in connection with series C stock for the reason that in connection with the series D stock there was involved the drawing of certificates by lot and the incidental checking.

These expenses appear to be proper

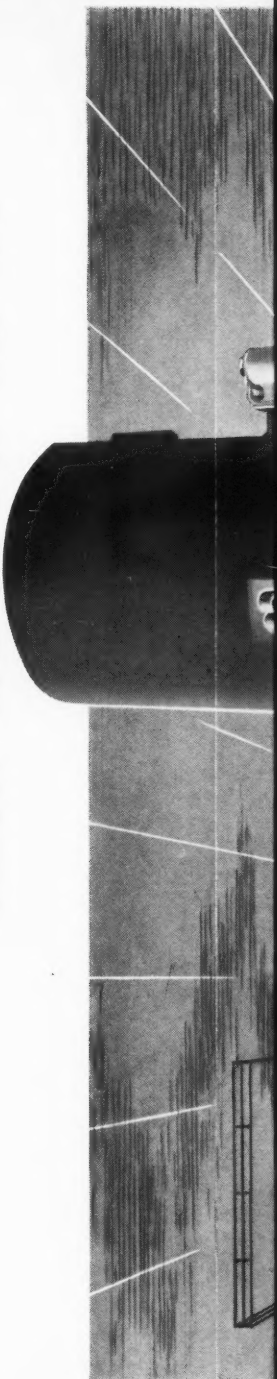
and necessary in connection with the redemption of the preferred stock.

Miscellaneous expenses are \$128.36 in excess of the company's original estimate. They purport to cover the traveling expenses, meals, and lodging of various officers of the corporation and legal and traveling expenses of attorneys paid directly by the corporation. No explanation has been supplied as to why the expenditures exceeded the estimates for Miscellaneous Expenses. However, the amount of the excess is small and is partially offset by an underestimate of \$70 for legal services.

Conclusion and Recommendation

It appears that the expenses incurred by Rochester Gas and Electric Corporation in the redemption of its preferred stock and redemption of its capital stock are proper and reasonable costs thereof.

I recommend that an order be adopted amending Clause 1 of the order of June 22, 1943 to include not to exceed \$10,704.85 and directing that they be charged to surplus. The order should also require the company to submit revised journal entries to reflect the disposition of the total expenses herein authorized. An order is submitted accordingly.



THE EYE THAT NEVER SLEEPS

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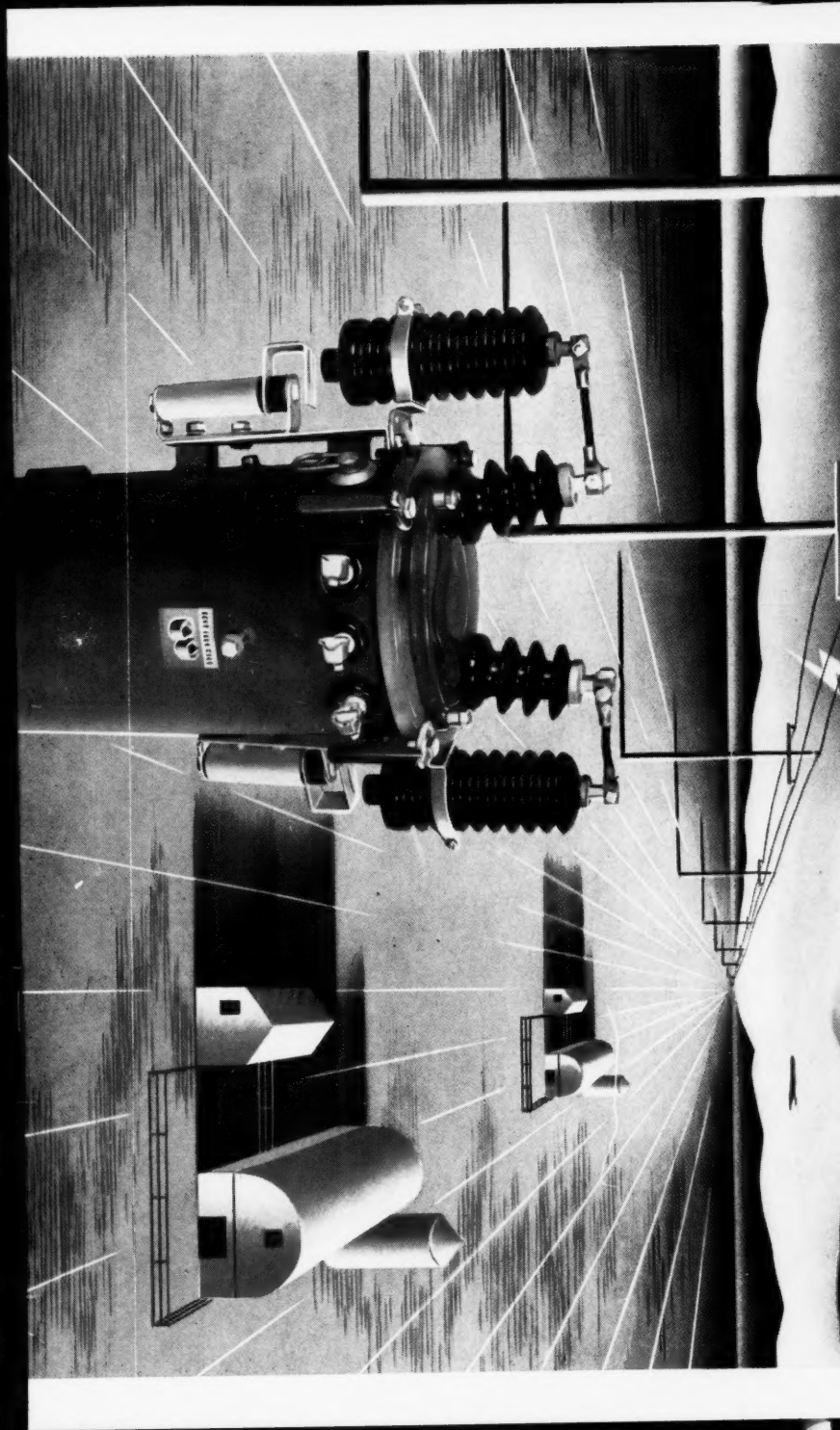
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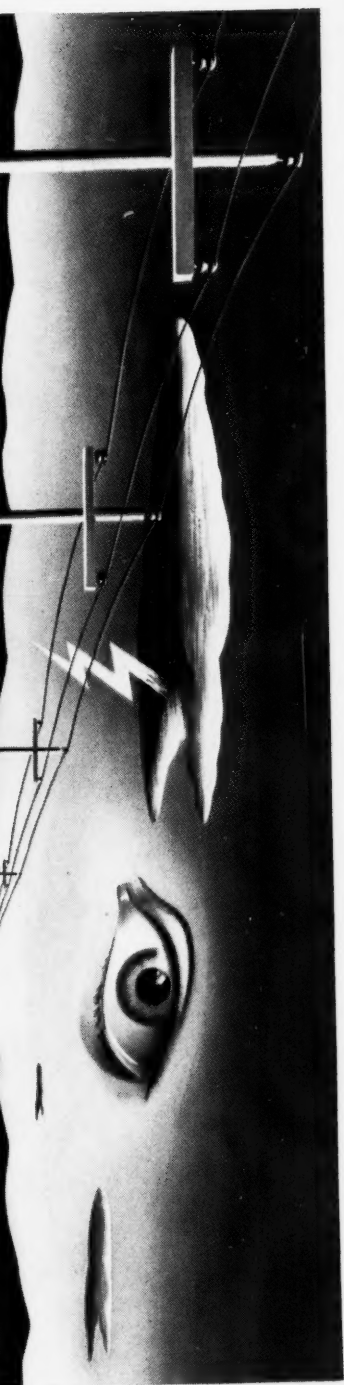
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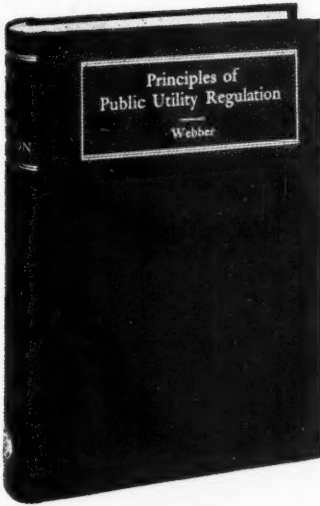
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Sylvania Presents Awards For Fixture Designs

FOUR major awards to utility lighting people who participated in the recent fixture design competition sponsored by Sylvania Electric Products Inc., were presented at a special dinner in their honor held at the Waldorf-Astoria in New York on February 7th. These awards were presented by Robert H. Bishop, manager of Sylvania lighting sales to C. J. Berry of the Consolidated Gas Electric Light & Power Company of Baltimore, who won first prize; L. B. Paist of the Northern States Power Company of Minneapolis, who won second prize; H. Grattan, Jr., of the Potomac Electric Power Company of Washington, D. C., who won third prize; and Walter Kelley, Jr., of the Blackstone Valley Gas & Electric Company of Pawtucket, Rhode Island, who won fourth prize.

In addition to cash prizes for the first four winners, special awards were made to representatives of their companies in behalf of their interest in better lighting.

The purpose of the competition, announced early last September, was to stimulate interest in improved designs for a commercial type of fluorescent fixture for four 40 watt lamps. Prizes offered for the winning designs totaled \$1,600. A final tabulation of entries revealed participation by lighting men representing most of the leading utility companies in the United States.

\$232,735 Paid to G-E Workers For Suggestions in 1944

PRODUCTION suggestions from employees, many of which accelerated the war program, netted General Electric workers \$232,735 in awards during 1944, according to company tabulations recently released. The total payment was for 19,488 ideas adopted by the suggestion committee.

Some of the suggestions incorporated into the company's production program aided the war effort by showing how to save critical

materials or how to reduce the time required to complete a job. Others eliminated safety hazards, while still others simplified work operations.

New Connector Lug Developed by O. Z.

IN response to a demand for a solderless lug that would accommodate more than one size of wire, the O. Z. Electrical Manufacturing Company, of Brooklyn, New York, has developed a new combination type "XL" lug. Made of cast copper alloy, this fitting is so designed that high clamping pressure is exerted by the pressure plate. This also insures high conductivity on any one of the wires in a wide range of sizes. Socket wrenches are furnished without cost.

Complete details of this and other new products, together with the regular O. Z. line are given in a new 140-page catalog. It illustrates and describes, with specifications and price lists, the full O. Z. line including conduit fittings, cable terminators, junction boxes, solderless connectors, power connectors, and grounding devices.

J. H. Wenner Promoted by Westinghouse

J. HOWARD WENNER, former lighting specialist for the Westinghouse Electric & Mfg. Company at Allentown, has been promoted to the position of street lighting specialist for the company's entire Middle Atlantic district. This area includes Eastern Pennsylvania, Southern New Jersey, Maryland, Delaware, Virginia, Southern West Virginia, and parts of Tennessee, Kentucky, and North Carolina. His headquarters are now in Philadelphia. The announcement was made by George Maertz, district agency and specialties division manager for the company.

Barometric Condensers Booklet

"BAROMETRIC CONDENSERS" is the title of a new bulletin announced by Ingersoll-Rand Company. It covers both the disc-flow and ejector-jet types, explaining the uses, advantages and operation of each. Several schematic diagrams illustrate how these vacuum-producing systems work and a number of photographs show the condensers in various industries such as power, chemical, fertilizer, and sugar plants.

According to the manufacturer, these condensers (Continued on 38)

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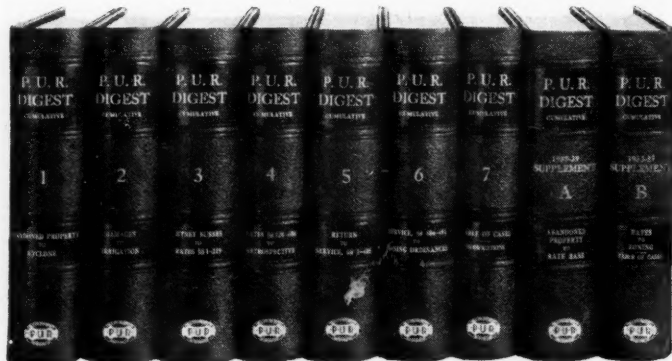
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densers are suitable for any vacuum service where it is not necessary to reclaim the condensate. They are used with steam engines, steam turbines, vacuum pans, and evaporators. They are also ideal for high-vacuum processes, such as vacuum cooling, distillation, impregnation, hydration, and dehydration.

Copies of the bulletin (Form 9012) may be secured from Ingersoll-Rand Company, 11 Broadway, New York 4, New York or any of its countrywide branches.

Todd Shipyards Corp. Sends 17,791 Ships Into War

Todd Shipyards Corporation in 1944 surpassed all production records of the previous two wartime years and brought the number of ships its ten yards have built, repaired, or converted to war purposes to 17,791—a total of more than 92,000,000 tons—it was disclosed recently by John D. Reilly, president of the corporation.

C.W.E.A. Appoints Barr Chief Engineer

NEIL K. BARR has been appointed to the position of chief engineer of the Copper Wire Engineering Association with headquarters at St. Louis, Missouri.

The Copper Wire Engineering Association makes available technical information involving the use of copper and copperweld-copper conductors.

Edison-Splitdorf Names Cerf as Chief Engineer

ANNOUNCEMENT is made by A. J. Clark, vice president and general manager of the Edison-Splitdorf Corp., a division of Thomas A. Edison, Inc., of the appointment of Gustave D. Cerf as chief engineer of that subsidiary. Mr. Cerf has been with Edison-Splitdorf for more than five years in the capacity of assistant chief engineer and fills the position made vacant by the resignation of E. B. Nowosielski.

Previous to his affiliation with Edison-Splitdorf Corp., Mr. Cerf was with the Scintilla Magneto Corporation for ten years. Prior to that time he was engaged in power plant designing and planning in Switzerland, his birthplace.

Mr. Cerf already has made tentative plans for the intensification of production of commercial and aircraft products for the period following the war.

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Five Million Cubic Foot Gas Holder to be Built by Stacey

THE construction of a five million cubic foot telescopic gas storage holder for the City of Long Beach, California, has been awarded to The Stacey Brothers Gas Construction Company, one of the Dresser Industries, according to an announcement by William H. Partridge, superintendent of the municipal gas department.

The five-lift structure will be the world's largest all-welded panel type, water-seal gas holder and will provide reserve storage to meet the high peak loads which have resulted from the increased industrial activity in this area.

Mobile Unit Substations Shipped to U.S.S.R.

TWENTY mobile unit substations, manufactured in record time, have been shipped to the Union of Soviet Socialist Republics, according to R. C. Muir, General Electric vice president and general manager of its apparatus department. Designed and manufactured to restore electric power in devastated areas and towns until local equipment can be placed in service, these units are the first complete, trailer-type substations to be exported for service in war-torn areas. Ten of the units are rated 1,000 kilovolt-amperes and the remainder are rated 1,800 kilovolt-amperes.

Triangular Tower Engineered For Speedy Erection

LIGHT weight of individual parts and simplification of design contribute to the facility with which the Harco "Blizzard King" radio or structural tower can be erected. According to the manufacturer, a four-man crew is sufficient for all towers, and the erection time runs from 10 hours for the 90-foot design to 50 hours with the 425-foot giant.

Full details can be obtained from the Harco Steel Construction Company, Inc., 1180 East Broad street, Elizabeth 4, New Jersey.

Proctor Electric Appointment

ROBERT M. OLIVER, vice president and general sales manager of the Proctor Electric Company, announces the appointment of James I. Arnett as service manager.

Mr. Arnett comes to Proctor from the General Electric Company where he served for eight years as service manager of the home laundry equipment department.

Named Personnel Director

HAROLD W. KEALEY has been appointed director of personnel of Elliott Company, Jeannette, Pennsylvania, in addition to his duties as assistant secretary, according to an announcement by Grant B. Shipley, president.

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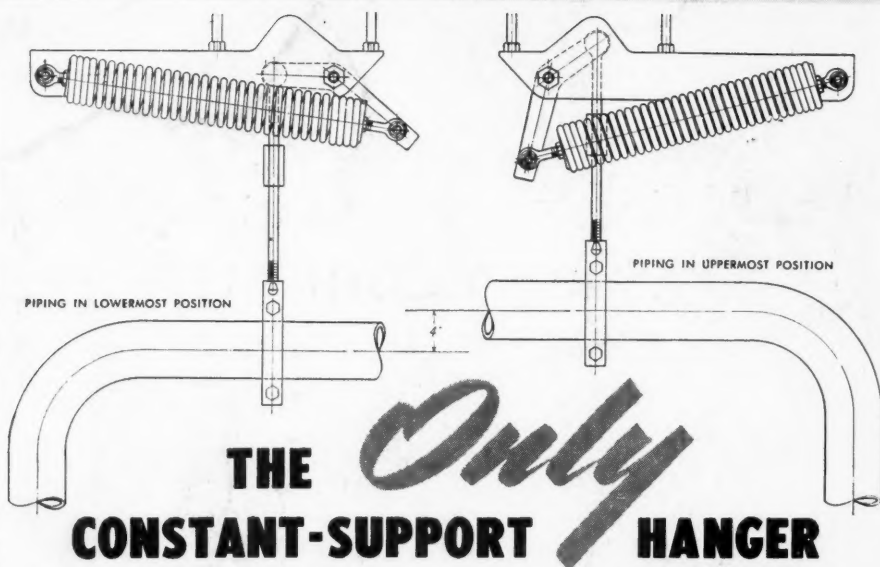
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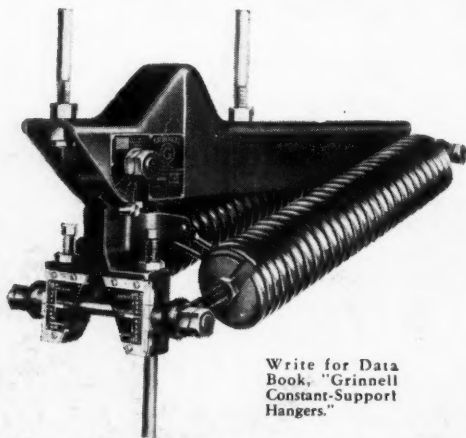
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